

Scout Report sent out

Noted in the NID File

Location map pinned

Approval or Disapproval Letter

Date Completed, P. & A. or
operations suspended

Pin changed on location map

Approval and Record of A & P

Water Off Test

Gas Test

☒
☒
☒
☒
☐
☐
☐
☐
☐
☒

9-6-56

CONVERTED TO WATER INJECTION WELL 6-8-65

FILE NOTATIONS

Entered in NID File

Entered on R Sheet

Location Map Pinned

Card Indexed

W/R for State or Fee Land

Checked by Chief

Copy NID to Field Office

Approval Letter

D's approval letter

DATA

Date Well Completed

CW ☒ WW ☐ TA ☐

CW ☐ OS ☐ PA ☐

Location Inspected

Bond released

State or Fee Land

LOGS FILED

Driller's Log

Electric Logs (No.)

El

J

EFH

GR

GR-N

Micro

Lat

Mi-L

Sonic

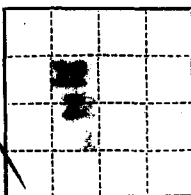
Other

950 MCF

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Indian Agency _____
Mineral Right _____
Allotted Tribal Lands _____
Lease No. 11-22-23-24



SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	<input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Well No. Crack 1 is located 2000 ft. from [S] line and 1000 ft. from [E] line of sec. 36
NE 1/4, SW 1/4, 22 22 23 E. S. 1. N. 2. E.
 (1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Wildcat San Juan N.M.
 (Field) (County or Subdivision) (State or Territory)

The elevation of the level floor above sea level 5000 ft. (approx. ground)

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Exploratory well

1. Drill to 1 1/4" hole to 1000'.
2. Run and cement 9 5/8" casing at 1000' with sufficient cement to reach surface.
3. Drill to total depth of 5000'.
4. If commercial production is obtained a supplementary completion notice will be filed; otherwise, plug and abandon in accordance with U.S.B.L. regulations.

Surface formation is the Esanapuro.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Shell Oil Company

Address 12 Richards Street

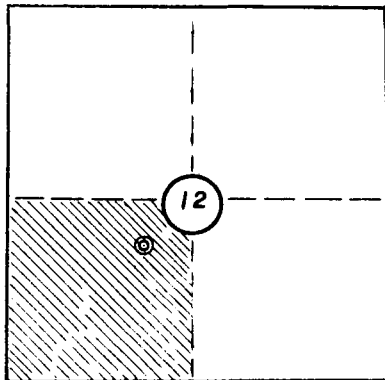
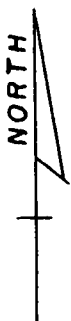
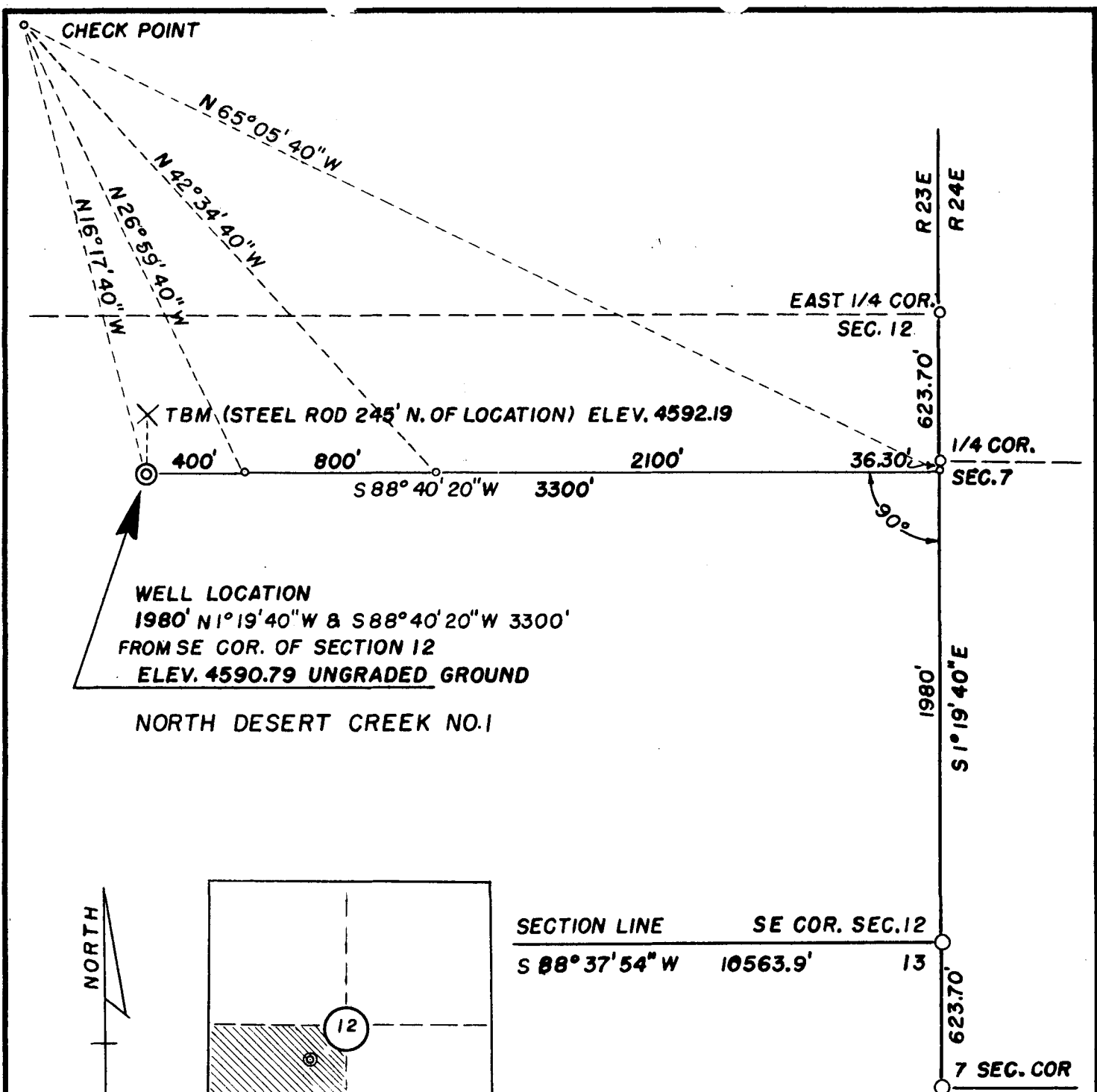
Salt Lake City, U. Utah

By B. W. Shepard

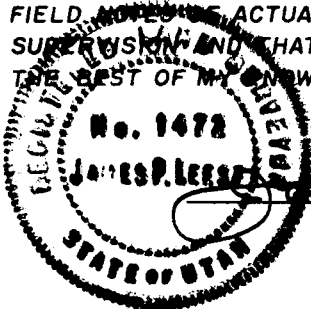
B. W. Shepard
Title Exploration Engineer

There appears to be a mistake in this location well is in center of SW 1/4 Sec. 22

Noted A. J. Smart
Cast



THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM
 FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY
 SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO
 THE BEST OF MY KNOWLEDGE AND BELIEF.



James P. Leese
JAMES P. LEESE
 REGISTERED LAND SURVEYOR
 REG. NO. 1472 UTAH

SHELL OIL CO.	
WELL LOCATION NE 1/4 SW 1/4	
SECTION 12 T41S R23E SLM	
SAN JUAN COUNTY UTAH	
APRIL 2 1956	SCALE 1" = 600'
DRAWN BY W.C.	
SAN JUAN ENGINEERING CO. FARMINGTON NEW MEXICO	
Z16-508	

1/4 COR.S12

1/4 COR.S7

SECTION LINE

TBM EL. 4691.39
300' NORTH

WELL LOCATION
660' FROM THE SOUTH LINE
660' FROM THE EAST LINE
ELEV. 4698.14

REF. POINTS 150' N. E. S. & W. FROM LOCATION

660'
S 88°38'W

S 46°24'E

660'
N 19°40'W

SECTION LINE

S 88°37'54"W

12

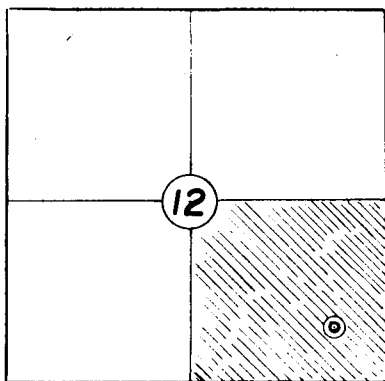
13

T 41 S
R 23 E R 24 E
S 12 S 7
S 13
1953

B.L.M. BRASSCAP

7

18



THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED
FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR
UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND
CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

James P. Leese
JAMES P. LEESE
REGISTERED LAND SURVEYOR
REG. NO. 1472 UTAH.

SHELL OIL CO.

WELL LOCATION SE 1/4 SE 1/4
SECTION 12 T41S R23E SLM
SAN JUAN COUNTY UTAH

JUNE 21 1956

SCALE 1" = 500'

DRAWN BY W.C.

SAN JUAN ENGINEERING CO.
FARMINGTON NEW MEXICO

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Indian Agency _____
Window Rock _____
Allotted Tribal Lands _____
Lease No. 14-20-601-246

12		
1		

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	<input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

MAY 2 1956, 19

North Desert
Well No. Creek 1 is located 1960 ft. from S line and 2000 ft. from E line of sec. 12
NE 1/4, SW 1/4 12 41 S. 23 E. S. 1. B. M.
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Wildcat San Juan Utah
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 4593 ft. (approx. ground)

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Exploratory Well

1. Drill 12 1/4" hole to 1050'±.
2. Run and cement 9 5/8" casing at 1050'± with sufficient cement to reach surface.
3. Drill to total depth of 5600'±.
4. If commercial production is obtained a supplementary completion notice will be filed, otherwise, plug and abandon in accordance with U.S.G.S. regulations.

Surface formation is the Recapture.

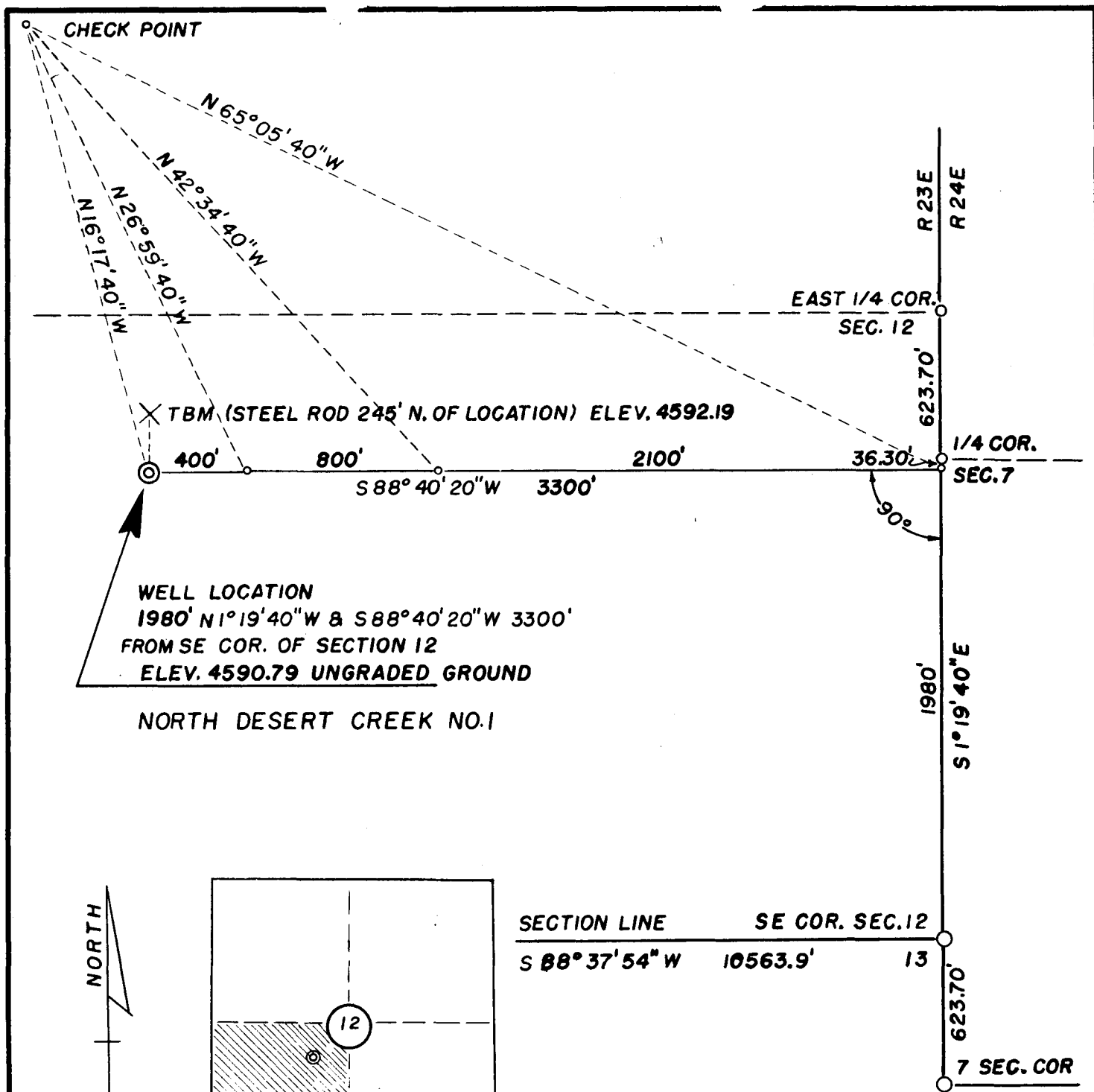
I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Shell Oil Company

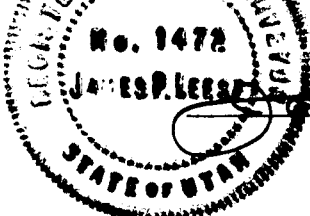
Address 13 Richards Street

Salt Lake City 1, Utah

By B. W. Shepard
B. W. Shepard
Title Exploitation Engineer



THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF THE ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



James P. Leese
JAMES P. LEESE
 REGISTERED LAND SURVEYOR
 REG. NO. 1472 UTAH

SHELL OIL CO.	
WELL LOCATION NE 1/4 SW 1/4	
SECTION 12 T4S R23E SLM	
SAN JUAN COUNTY UTAH	
APRIL 2 1956	SCALE 1" = 600'
DRAWN BY W.C.	
SAN JUAN ENGINEERING CO. FARMINGTON NEW MEXICO	
Z16-508	

May 4, 1956

**The Shell Oil Company
33 Richards Street
Salt Lake City, Utah**

Attn: E. W. Shepard

Gentlemen:

unmended
This is to acknowledge receipt of your notice of intention to drill Well No. North Desert Creek 1, which is to be located 1980 feet from the south line and 3300 feet from the east line of Section 12, Township 41 South, Range 23 East, SEEM, San Juan County, Utah.

Please be advised that insofar as the Utah Oil & Gas Conservation Commission is concerned approval to drill said well is hereby granted.

Yours very truly,

UTAH OIL & GAS CONSERVATION COMMISSION

**GLENN B. FREIGHT
SECRETARY**

**cc: Don Russell
Dist Eng
USGS
Federal Bldg, City**



SHELL OIL COMPANY

DESERET NEWS BUILDING
33 RICHARDS STREET
SALT LAKE CITY 1, UTAH

DAvis 2-0471
TELEPHONE 22-0471

June 27, 1956

State of Utah
Oil and Gas Conservation Commission
Room 105
Capitol Building
Salt Lake City 14, Utah

Gentlemen:

Attached are two copies of our U.S.G.S. Notice of Intention to Drill for North Desert Creek 1, which we submit for your approval. This location is 660' from south line and 660' from east line of Sec. 12, T. 41 S., R. 23 E., S.L.M., San Juan County, Utah.

On May 2, 1956, we submitted a Notice of Intention to Drill for North Desert Creek 1 at a location 1980' from south line and 1980' from west line of Sec. 12, T. 41 S., R. 23 E., S.L.M. The Notice was approved by your office but drilling was never commenced at this location.

Therefore, we wish to withdraw our Notice of Intention to Drill for North Desert Creek 1 dated May 2, 1956, and submit the attached Notice of Intention for the new location.

Your approval is respectfully requested.

Very truly yours,

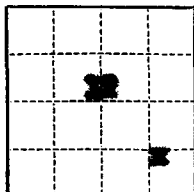
B. W. Shepard

B. W. Shepard
Exploitation Engineer

Attachment

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



an Agency Bureau
Window Book
Allottee Drilled Lands
Lease No. 11-20-60-246

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	<input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

June 27, 1956

North Desert
Well No. Druck 1 is located 660 ft. from SE line and 660 ft. from E line of sec. 12
SE 1/4, SE 1/4 12 41 S. 23 E. S.L.M.
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Wildcat San Juan Utah
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 4596 ft. (approx. ground)

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Exploratory Well

1. Drill 12 1/4" hole to 1050'±.
2. Run and cement 9 5/8" casing at 1050'± with sufficient cement to reach surface.
3. Drill to total depth of 5600'±.
4. If commercial production is obtained a supplementary completion notice will be filed, otherwise plug and abandon in accordance with U.S.G.S. regulations.

Surface formation is the Recapture.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Shell Oil Company

Address 33 Richards Street

Salt Lake City 1, Utah

By B.W. Shepard

B. W. Shepard
Title Exploration Engineer

June 28, 1956

**The Shell Oil Company
33 Richards Street
Salt Lake City, Utah**

Attn: B. W. Shepard

Gentlemen:

This is to acknowledge receipt of your amended notice of intention to drill Well No. North Desert Creek 1, which is located 660 feet from the south line and 660 feet from the east line of Section 12, Township 41 South, Range 23 East, S1M, San Juan County, Utah.

Please be advised that insofar as the Utah Oil & Gas Conservation Commission is concerned approval to drill said well is hereby granted.

Yours very truly,

**UTAH OIL AND GAS CONSERVATION
COMMISSION**

**CLEON B. FREIGHT
SECRETARY**

CBF:cc

**cc: Don Russell
Dist. Eng.
USGS
Federal Bldg, City**

ROTARY ENGINEERING COMPANY
WELL LOGGING SERVICE
1221 MILE HIGH CENTER DIAL ACOMA 2-4279
DENVER 2, COLORADO

September 14, 1936

The Shell Oil Company
33 Richards
Salt Lake City, Utah

ATT: Exploitation Engineer

Gentlemen:

We are submitting to you fifteen copies of our hydrocarbon analysis log on your North Desert Creek #1, in San Juan County, Utah. The section logged was from 4410' to 5601'.

A description of the data shown on this log is given on the attached sheet.

This well was logged continuously by means of our automatic gas detecting equipment. Our Mr. Melton, who operated this equipment, also logged the cutting samples for lithology, porosity and oil fluorescent cuts. The gas from cuttings was run at various intervals of interest.

In reviewing the results of our log we feel that all pertinent data contained is self-explanatory. If we can be of further service in the interpretation of this log please notify us and we will be glad to call on you at your convenience.

We wish to thank you and your personnel for the consideration and cooperation shown us in securing the information on this well.

Yours very truly,

ROTARY ENGINEERING COMPANY

Olson T. Moore
OLAN T. MOORE
Rocky Mountain Manager

bp

(See Distribution on Page 2)

Phillips Petroleum Company - 5
301 Kerber Building
Albuquerque, New Mexico
ATT: Mr. Frank Adler

The Superior Oil Company - 5
930 Edison Building
Los Angeles, California
1 - J. C. Cody
1 - Don Kosh
1 - J. T. Isenberg

The Superior Oil Company - 2
P. O. Box 200
Casper, Wyoming
ATT: Mr. J. D. Simmons

The Superior Oil Company - 2
503 1st National Bank Bldg.
Denver 2, Colorado
ATT: Mr. Engle

1. Drilling mud characteristics.
2. Bit record.
3. The drilling rate curve plotted in minutes per foot. It will be noted this is plotted so that on fast drilling the curve approaches the left margin of the log.
4. Depth.
5. Lithology.
6. Visual porosity column shown next to lithology column.
7. Leached residual oil units. This curve is obtained by applying solvent to the drill cuttings and evaluating by use of ultraviolet radiation the residual liquid hydrocarbons collected on the color reaction plates.
8. The percentage of sample showing oil fluorescence when viewed under ultraviolet radiation. All mineral fluorescence is excluded from this evaluation.
9. Two gas curves secured from the cuttings and shown in "gas from cuttings" column. The dotted curve is obtained by analyzing the cuttings for all combustible gases. The dashed curve is obtained by burning the gas at a predetermined reduced temperature. This curve represents all combustible gases other than methane.
10. Two gas curves secured from the mud return stream are plotted from the left margin of "gas from mud" column with increasing values extending to the right. The dotted curve is obtained by analyzing the mud for all combustible gases. The dashed curve is obtained by burning the gas at a predetermined reduced temperature. This curve represents all combustible gases other than methane.
11. Oil analyses are run on each two feet of samples.
12. Gas analyses are run on each two feet of samples.
13. All cuttings and mud samples are corrected for up-the-hole lag time.

U. S. LAND OFFICE

Salt Lake City

14-20-603-246

LEASE OR PERMIT TO PROSPECT -----

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company Shell Oil Company Address 33 Richards St., Salt Lake City, Utah
 Lessor or Tract Tribal Lands Field N. Desert Creek State Utah
 Well No. 1 Sec. 12 T. 41S R. 23E Meridian S.L.B. & M. County San Juan
 Location 600 ft. N. of S. Line and 660 ft. E. of E. Line of Sec. 12 Elevation 4710 K.B.
(Give K.B. feet relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed B. W. Shepard

Date September 6, 1956

Title Exploitation Engineer

The summary on this page is for the condition of the well at above date.

Commenced drilling July 23, 1956 Finished drilling September 4, 1956

(Denote gas by G)

No. 1, from 5578 to 5586 No. 4, from _____ to _____
 No. 2, from 5590 to 5598 No. 5, from _____ to _____
 No. 3, from _____ to _____ No. 6, from _____ to _____

None noted

No. 1, from _____ to _____ No. 3, from _____ to _____
No. 2, from _____ to _____ No. 4, from _____ to _____

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated		Purpose
							From—	To—	
8 5/8" 32#	32#	8	Spring	1255	Baker				Surface
5 1/2" 32#	32#	8	Spring	1255	Baker				Surface
<p>It is of the greatest importance to have a complete picture of the well. Please state in detail the dates of recording together with the reasons for the work and the results. If there were any changes made in the casing, please state the dates of recording together with the reasons for the work and the results.</p>									
<p>HISTORIA OF OIL OR GAS WELL</p>									
<p>10-2000-5 U. S. GOVERNMENT PRINTING OFFICE</p>									

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8 5/8"	1255'	300	Displacement	"	"
5 1/2"	5614'	250	Displacement	"	"

PLUGS AND ADAPTERS

Heaving plug—Material Cement Length Cleaned out to, Depth 5605
Adapters—Material _____ Size _____

FOLD | MARK

8 5/8"	1255'	300	Displacement	"	"
5 1/2"	5614'	250	Displacement	"	"

PLUGS AND ADAPTERS

Heaving plug—Material Cement Length Cleaned out to, Depth set in 5605

Adapters—Material _____ Size _____

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out
			None			

TOOLS USED

Rotary tools were used from 0 feet to 5624 feet, and from - feet to - feet
Cable tools were used from - feet to - feet, and from - feet to - feet

DATES

September 6, 1956 Put to producing September 6, 1956
B/D rate
The production for the first 24 hours was 1140 barrels of fluid of which 99.6% was oil; %
emulsion; % water; and 0.1% sediment. Gravity, 98.6 API 42°

If gas well, cu. ft. per 24 hours ----- Gallons gasoline per 1,000 cu. ft. of gas -----

Rock pressure, lbs. per sq. in. _____

EMPLOYEES

B. K. Peasley	Driller	A. L. Hatch	Driller
C. L. Boyle	Driller	C. R. Francis	Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
1465	2297	832	Chinle
2297	2360	63	Shinarump
2360	2502	142	Benkopi
2502	4460	1958	Cutler
4460	5432	972	Hermosa
5432	-		Paradox member

1602
10
1058 FEET
[OVER]
1602 7402
16-43094-4

[OVER]

16-43084-4

FOUR MILLION RECORD—Continued

Drilling rig	Material	Size	Length	Depth set
LOGS AND ADAPTERS				
Casing size	Weight per foot	Number sacks of cement	Method used	Mud gravity
Amount of mud used				

MUDDING AND CEMENTING RECORD

HISTORY OF OIL OR GAS WELL

16-43094-2 U. S. GOVERNMENT PRINTING OFFICE

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "sidetracked" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

Casing size	Per foot weight	Thickness per inch	Make	Amount	Kind of shoe	Cut and pulled from	From	To	Purpose
-------------	-----------------	--------------------	------	--------	--------------	---------------------	------	----	---------

Attached: (1) Casing Record, including Core Record, Drilling Report, and Litch Sample Description.

No. 3' from to

No. 1' from to (2) Rotary Well Logging Unit Report.

IMPORTANT WATER SANDS

No. 3' from to No. 6' from to

No. 3' from to No. 2' from to

No. 1' from to No. 4' from to

(Denote gas by G)

OIL OR GAS SANDS OR ZONES

Commenced drilling to Finished drilling to

The summary on this page is for the condition of the well at above date.

Date

signed so far as can be determined from all available records.

The information given herewith is a complete and correct record of the well and all work done thereon

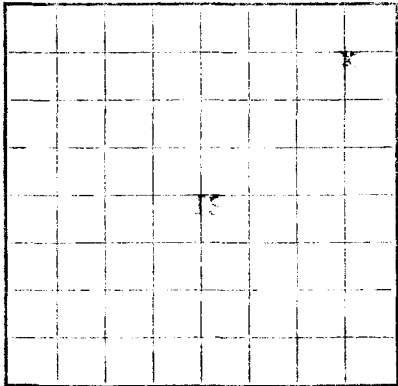
Location of well to of line and to of line of

Well No. sec. T. R. S. Township County

Owner or Agent Field State

Company Address

LOCATE WELL CORRECTLY



LOC OF OIL OR GAS WELL

GEOLOGICAL SURVEY

DEPARTMENT OF THE INTERIOR

UNITED STATES

PERMITS OR PERMIT TO PROSPECT

SERIAL NUMBER

U. S. LAND OFFICE

ROTARY ENGINEERING COMPANY

WELL LOGGING SERVICE

COMPANY SHELL OIL CO
WELL NORTH DESERT CREEK NO-1
FIELD SEC-12 T41S R23E
COUNTY SAN JUAN CO,
STATE UTAH.

DEPTH LOGGED
DATE LOGGED

FROM
4410
8-12-56

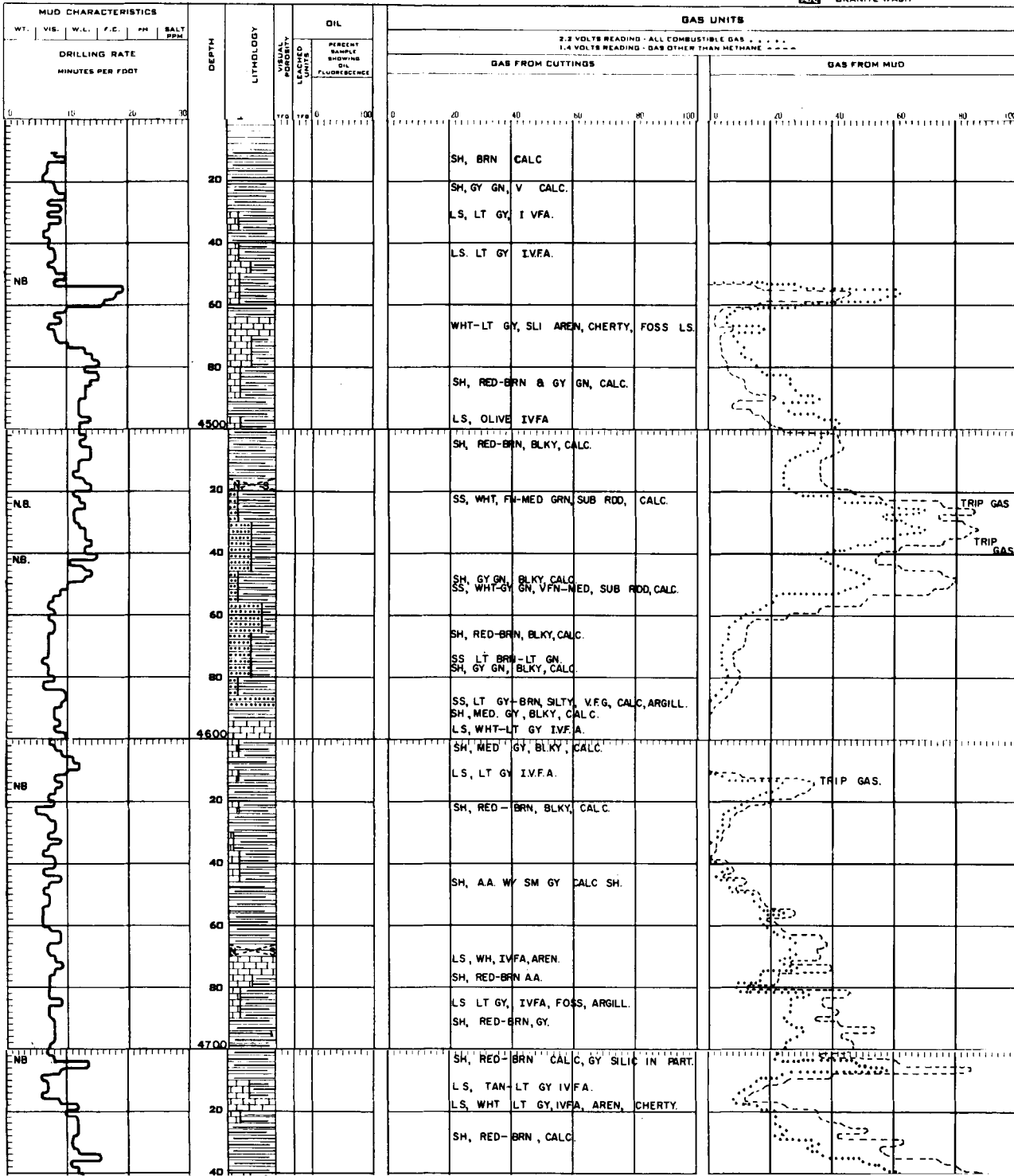
TO
5606
9-1-56

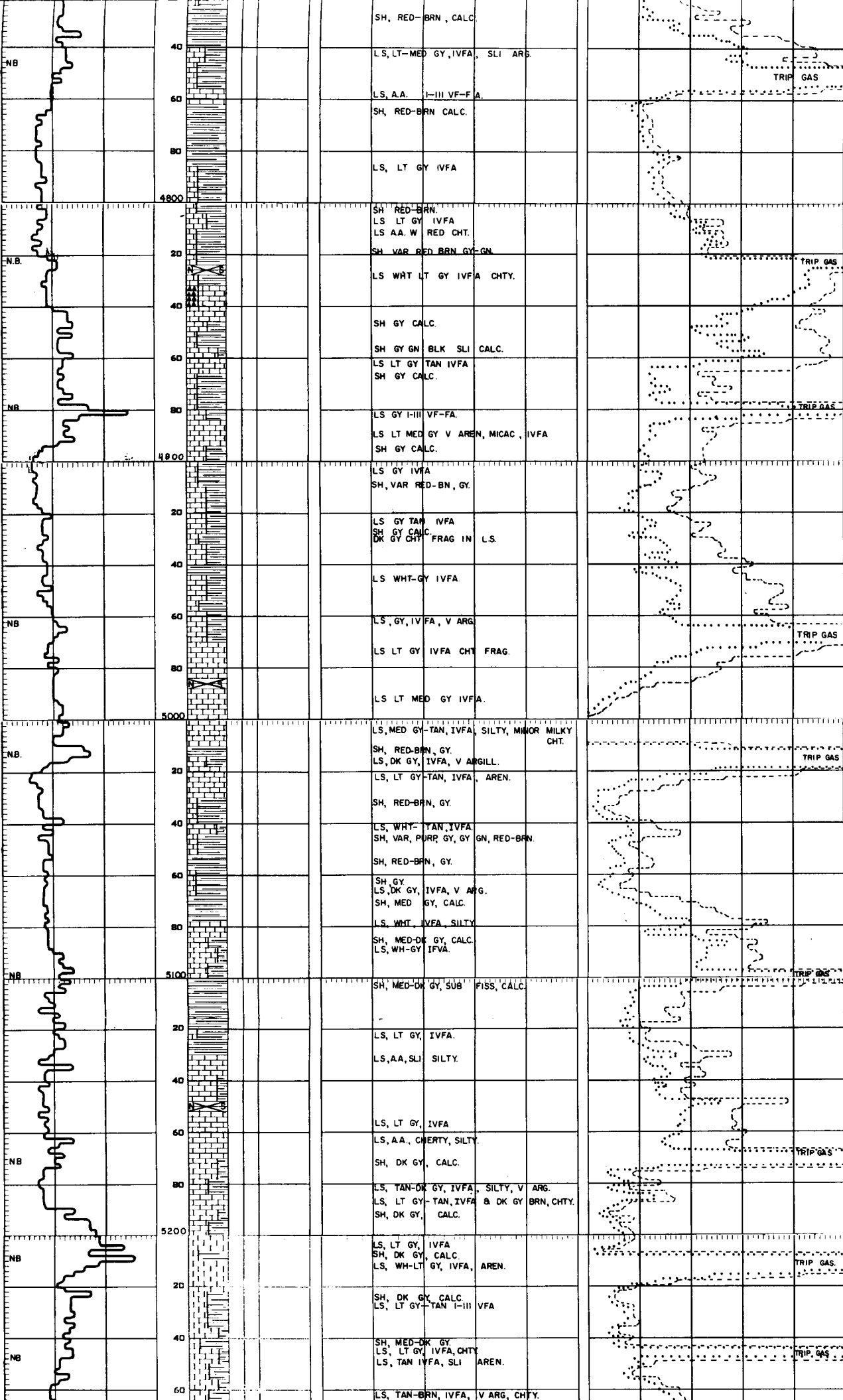
SUPERVISING ENGINEER ART MELTON

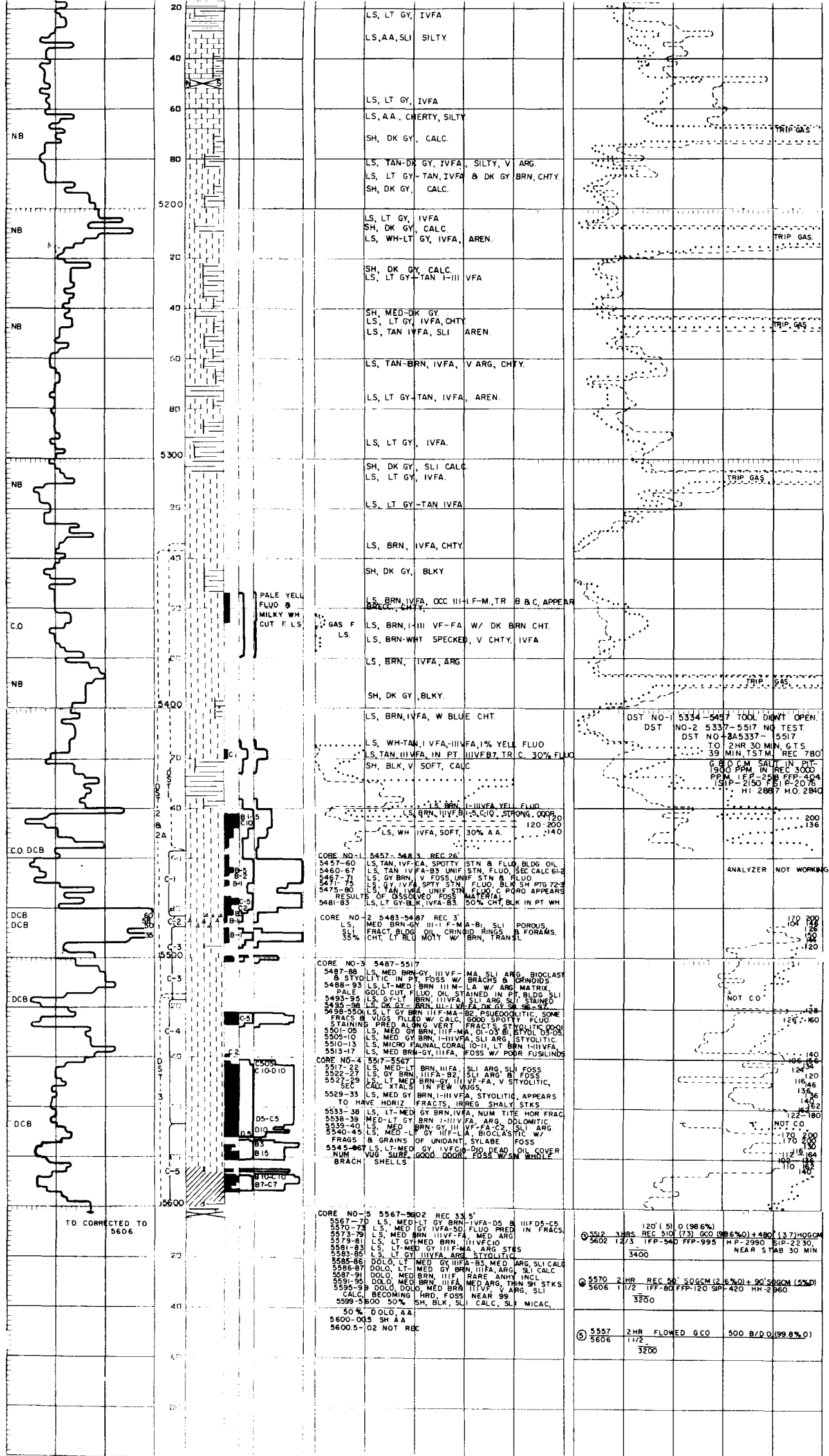
ELEVATION
N. B. NEW BIT
N. C. B. NEW CORE BIT
W. L. D. B. WIRE LINE DRILLING BIT
W. L. C. B. WIRE LINE CORE BIT
C. D. CIRCULATED OUT
N. R. NO RETURNS
D. S. T. DRILL STEM TEST

LEGEND
VISUAL POROSITY
TRACE □
FAIR □ □
GOOD □ □ □

SAND
LIMESTONE
DOLOMITE
SHALE
CHERT
ANHYDRITE
COAL
CONGLOMERATE
SANDY SHALE
GRANITE
GRANITE WASH







North Desert Creek
(FIELD)
San Juan County, Utah
(COUNTY)

DRILLING REPORT FOR PERIOD ENDING

WELL NO. _____

12
(SECTION OR LEASE)
T41S, R23E
(TOWNSHIP OR RANGHO)

DAY	DEPTHS		REMARKS																																																																								
	FROM	TO																																																																									
			<p>DEVIATION RECORD</p> <table border="1"> <thead> <tr> <th>DEPTH</th> <th>DEGREE</th> <th>DEPTH</th> <th>DEGREE</th> </tr> </thead> <tbody> <tr> <td>90</td> <td>1/4°</td> <td>4049</td> <td>1/2°</td> </tr> <tr> <td>200</td> <td>1/4°</td> <td>4245</td> <td>1/2°</td> </tr> <tr> <td>375</td> <td>1/4°</td> <td>4453</td> <td>1°</td> </tr> <tr> <td>490</td> <td>1/4°</td> <td>4749</td> <td>1-3/4°</td> </tr> <tr> <td>699</td> <td>1/4°</td> <td>4764</td> <td>1-1/4°</td> </tr> <tr> <td>913</td> <td>1/4°</td> <td>5307</td> <td>1/2°</td> </tr> <tr> <td>1132</td> <td>1/4°</td> <td></td> <td></td> </tr> <tr> <td>1610</td> <td>1°</td> <td></td> <td></td> </tr> <tr> <td>1880</td> <td>3/4°</td> <td></td> <td></td> </tr> <tr> <td>2042</td> <td>1/2°</td> <td></td> <td></td> </tr> <tr> <td>2385</td> <td>1/4°</td> <td></td> <td></td> </tr> <tr> <td>2727</td> <td>1-3/4°</td> <td></td> <td></td> </tr> <tr> <td>2922</td> <td>2°</td> <td></td> <td></td> </tr> <tr> <td>3200</td> <td>1°</td> <td></td> <td></td> </tr> <tr> <td>3508</td> <td>1/2°</td> <td></td> <td></td> </tr> <tr> <td>3638</td> <td>1/2°</td> <td></td> <td></td> </tr> <tr> <td>3830</td> <td>1/2°</td> <td></td> <td></td> </tr> </tbody> </table>	DEPTH	DEGREE	DEPTH	DEGREE	90	1/4°	4049	1/2°	200	1/4°	4245	1/2°	375	1/4°	4453	1°	490	1/4°	4749	1-3/4°	699	1/4°	4764	1-1/4°	913	1/4°	5307	1/2°	1132	1/4°			1610	1°			1880	3/4°			2042	1/2°			2385	1/4°			2727	1-3/4°			2922	2°			3200	1°			3508	1/2°			3638	1/2°			3830	1/2°		
DEPTH	DEGREE	DEPTH	DEGREE																																																																								
90	1/4°	4049	1/2°																																																																								
200	1/4°	4245	1/2°																																																																								
375	1/4°	4453	1°																																																																								
490	1/4°	4749	1-3/4°																																																																								
699	1/4°	4764	1-1/4°																																																																								
913	1/4°	5307	1/2°																																																																								
1132	1/4°																																																																										
1610	1°																																																																										
1880	3/4°																																																																										
2042	1/2°																																																																										
2385	1/4°																																																																										
2727	1-3/4°																																																																										
2922	2°																																																																										
3200	1°																																																																										
3508	1/2°																																																																										
3638	1/2°																																																																										
3830	1/2°																																																																										
<p>CONDITION AT BEGINNING OF PERIOD</p> <table border="1"> <thead> <tr> <th colspan="3">HOLE</th> <th>CASING SIZE</th> <th>DEPTH SET</th> </tr> <tr> <th>SIZE</th> <th>FROM</th> <th>TO</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>DRILL PIPE SIZES</p>				HOLE			CASING SIZE	DEPTH SET	SIZE	FROM	TO																																																																
HOLE			CASING SIZE	DEPTH SET																																																																							
SIZE	FROM	TO																																																																									

K. A. Hauptfleisch

SIGNED

SHELL OIL COMPANY

WELL NO. 1

North Desert Creek

DRILLING REPORT

Section 12

(FIELD)

FOR PERIOD ENDING

(SECTION OR LEASE)

San Juan, Utah

July 30, 1956

T1S, R23E, SLB&M

(COUNTY)

(TOWNSHIP OR RANCHO)

DAY 1956	DEPTHS		REMARKS
	FROM	TO	
			<p><u>LOCATION:</u> 660' from South line and 660' from East line of Section 12, T. 41 S., R. 23 E., S.L.B.&M., San Juan County, Utah.</p> <p><u>ELEVATIONS:</u> K.B. 4710.34' D.F. 4708.34' MAT. 4699.1'</p>
7-23	0	113	<u>Drilled 113'</u> . Spudded 6:00 P.M. Treated mud with gel.
7-24	113	575	<u>Drilled 462'</u> . Treated mud with gel.
7-25	575	1210	<u>Drilled 635'</u> . Twisted off at 1020' leaving 14 drill collars in hole (top of fish 590'). Recovered fish with 7 3/8" American overshot.
7-26	1210	1268	<u>Drilled 58'</u> . Circulated. Ran and cemented 1242' of 8 5/8", 32#, 8rd surface casing, set at 1255'. Cementing done by Rocky Mountain Cementers. Centralizers located at 1212', 912', and 612'. Guide shoe, Baker. No bleed back. Nipped up.
7-27	-	1268	Nipped up and worked on BOP (tested with 1000 psi on casing), cemented at surface (8 5/8" casing) with 80 sacks cement.
7-28	1268	1604	<u>Drilled 336'</u> . Drilled through plug at 1150' (18' of cement). Opened hole to 1268'. Treated mud with gel, caustic, soda ash, and Mantan.
7-29, 7-30	1604	2128	<u>Drilled 524'</u> . Treated mud with caustic, Mantan, gel.
			<p><u>Mud Summary 7-23 to 7-30-56:</u></p> <p>Wt. 9-11.1 #/gal. Vis. 10-45 sec.</p>

CONDITION AT BEGINNING OF PERIOD				
HOLE			CASING SIZE	DEPTH SET
SIZE	FROM	TO		
DRILL PIPE SIZES				

J. Richard Anklaam

SIGNED

North Desert Creek

(FIELD)
San Juan, Utah

(COUNTY)

DRILLING REPORT

FOR PERIOD ENDING

August 16, 1956

WELL NO. 1

Section 12

(SECTION OR LEASE)
T 41 S., R 23 E., S1M

(TOWNSHIP OR RANCHO)

DAY 1956	DEPTHS		REMARKS
	FROM	TO	
7-31 8-1	2128	2828	<u>Drilled 700'</u> . Converted to gypsum base mud at 2500'. Treated mud with aquagel, soda ash, mantan, and caustic.
8-2 8-12	2828	4517	<u>Drilled 1689'</u> . Treated mud with Impermix, preservative, gypsum, and aquagel.
8-13	4517	4523	<u>Drilled 6'</u> . Pump clutch shaft broke 2:00 A.M.
8-14 8-15	4523	4523	Waited on pump clutch shaft.
8-16	4523	4542	<u>Drilled 19'</u> . Replaced new pump clutch shaft. Started drilling 5:00 P.M. Treated mud with impermix, gypsum, and preservative.
			Checked BOP daily.
			<u>Mud Summary 7-31-56 to 8-16-56:</u>
			Wt. 9.4-10.1 #/Gal.
			Vis. 34-54 sec.
			W.L. 5.4-10 cc
			F.C. 2/32 in.
			pH 7-9
			Sal. 500-1700 ppm (t).

CONDITION AT BEGINNING OF PERIOD				
HOLE			CASING SIZE	DEPTH SET
SIZE	FROM	TO		
11"	0	1268	8-5/8"	1255'
7 7/8"	1268	2128		
DRILL PIPE SIZES 4-1/2"			F.H. 16.6 #/ft.	

J. Richard Anklam

SIGNED

Wildcat

(FIELD)

San Juan, Utah

(COUNTY)

DRILLING REPORT FOR PERIOD ENDING

August 27, 1956

WELL NO. _____

North Desert Creek

(SECTION OR LEASE)

T. 41 S., R. 23 E., S1B1

(TOWNSHIP OR RANCHO)

DAY	DEPTHS		REMARKS
	FROM	TO	
8-17 8-25	4542	5439	Drilled 897'. Treated mud with aquagel, impermix, gypsum, preservative.
8-26	5439	5460	Drilled 18'. Cored 3'. Ran DST #1, 5334-5457, Johnson testers. Ran tester with 6-5/8" B.T. packers at 5328 and 5334, 3 inside pressure recorders (1" T, Amerada, Long) and 1 outside pressure recorder, 3/4" subsurface bean and 1" surface bean, perforations 5334-37 and 5429-57, no water cushion, 30' air cushion. 20 minute initial shut in. Tool did not open, disc valve failed to shear. Test failed. 400' of mud leaked into drill collars above tool either because of leak in reverse circulation valve or leak in drill collars.
8-27	5460	5487	Cored 27'. Core #1 5457-5483'. Cut core #2 5483-5487. Ran Gamma-Ray-Neutron log - Schlumberger. Checked BOP Daily
<p style="text-align: center;"><u>Mud Summary 8-17-56 to 8-27-56</u></p> <p> Wt. 9.9-10.3 #/gal. Vis. 38-50 sec. W.L. 6.1-12 cc. F.C. 2/32 in. Sal. 1400-2000 ppm pH 7.5 </p>			

CONDITION AT BEGINNING OF PERIOD				
HOLE			CASING SIZE	DEPTH SET
SIZE	FROM	TO		
11"	0	1268	8 5/8"	1255
7 7/8"	1268	4542		
DRILL PIPE 1 1/2" F.H.			16.6#/ft.	

J. Richard Anklam

SIGNED

Wildcat

DRILLING REPORT

North Desert Creek

(FIELD)

San Juan, Utah

(COUNTY)

August 31, 1956

(SECTION OR LEASE)

T. 41 S., R. 23 E., SLBM

(TOWNSHIP OR RANCHO)

DAY	DEPTHS		REMARKS																				
	FROM	TO																					
8-28	5487	5517	Cored 30'. Cut Core #3, 5487-5517. Ran DST #2, 5337-5517, Johnston tester with 6-5/8" packers at 5331' and 5337', four outside pressure recorders, 3/4" subsurface bean and 1" surface bean, 60' air cushion, perforations 5337-43' and 5494-5517'. Intended initial shut in 30 minutes. Test failed. Disc valve failed to shear because of 75' of mud above tool. ISIP 2150 psi.																				
8-29	5517	5555	<p>Cored 38'. Cut Core #4, 5517-5567. Ran DST #2A. The above data for DST #2 applies to DST#2A except that no air cushion was used and no ISIP was taken. Tool open 2 hours and 30 minutes and shut in 1 hour and 30 minutes. Faint blow increasing to weak blow in 1 minute, moderate blow in 1-1/2 minutes, strong blow in 20 minutes back to moderate blow in 39 minutes with gas to the surface. 4' fluid loss in annulus. Recovered 780' (8.5 bbl.) fluid including 30' (4 bbl.) mud, 45' (.6 bbl) gas cut mud, and 705' (7.5 bbl) oil, gas cut mud. (Gas rate nil)</p> <table><thead><tr><th>Feet above tester</th><th>Description</th><th>Salinity (t)</th><th>Wt. #/gal.</th><th>Gravity</th></tr></thead><tbody><tr><td>780</td><td>Mud</td><td>2200</td><td>9.7</td><td>38°</td></tr><tr><td>750</td><td>Gas Cut Mud</td><td></td><td></td><td></td></tr><tr><td>705</td><td>Oil, gas cut mud (Oil is greenish)</td><td>3000</td><td></td><td></td></tr></tbody></table> <p>IFP 258, FFP 404, FSIP 2078 (stabilized 80 minutes), IHP 2887, FHP 2840. Mud, before test 9.9#/gallon, 1900 ppm. Treated mud with impermix, gypsum, gel, and preservative.</p>	Feet above tester	Description	Salinity (t)	Wt. #/gal.	Gravity	780	Mud	2200	9.7	38°	750	Gas Cut Mud				705	Oil, gas cut mud (Oil is greenish)	3000		
Feet above tester	Description	Salinity (t)	Wt. #/gal.	Gravity																			
780	Mud	2200	9.7	38°																			
750	Gas Cut Mud																						
705	Oil, gas cut mud (Oil is greenish)	3000																					
8-30	5555	5602	Cored 47'. Cut Core #5, 5517-5567. Ran DST #3 (completed test 8-31-56), 5515-5602', Johnston testers. Ran tester with 6-5/8" bobtail packers at 5509 and 5515', four outside pressure recorders, 3/4" subsurface bean and 1" surface bean, 87' tailpiece with perforations from 5515-19' and 5579-5602', no air cushion. Tool open 3 hours, shut in 1 hour 40 minutes. Immediate faint blow increasing to strong in 1/2 minute, gas to surface in 3-1/2 minute, mud to surface in 12 minutes, oil to surface in 17 minutes, as mist in gas. 2' fluid loss in annulus. Recovered 1440' of fluid (16.2 bbls.) as follows:																				

CONDITION AT BEGINNING OF PERIOD

HOLE			CASING SIZE	DEPTH SET
SIZE	FROM	TO		
11"	0	1268	8-5/8"	1255'
7-7/8"	1268	5457		
7-3/4"	5457	5487		
DRILL PIPE 4-1/2" F.H. 16.6#/ft.				
SIZES				

J. Richard Anklaam

SIGNED

Wildcat

DRILLING REPORT

WELL NO.

(FIELD)

FOR PERIOD ENDING

North Desert Creek

San Juan, Utah

August 31, 1956

(SECTION OR LEASE)

(COUNTY)

T. 41 S., R. 23 E., S1E1M

(TOWNSHIP OR RANCHO)

DAY	DEPTHS		REMARKS																								
	FROM	TO																									
8-30	5555	5602	<table border="1"> <thead> <tr> <th>Feet of Fluid</th> <th>Description</th> <th>Cut.</th> <th>Gravity</th> </tr> </thead> <tbody> <tr> <td>510 (7.3)</td> <td>Gas Cut Oil</td> <td>100% oil</td> <td>41°</td> </tr> <tr> <td>150 (2.1)</td> <td>Heavily oil and gas cut mud</td> <td></td> <td></td> </tr> <tr> <td>180 (2.6)</td> <td>Gas Cut Oil</td> <td>100% oil</td> <td>41°</td> </tr> <tr> <td>480 (3.7)</td> <td>Heavily oil and gas cut mud</td> <td>No sample - fluid unloaded</td> <td></td> </tr> <tr> <td>120 (0.5)</td> <td>Oil</td> <td>100% oil</td> <td>41°</td> </tr> </tbody> </table> <p>Gas Rate 1500 MCF/D</p> <p>IFP 540, FFP 995, SIP 2230 nearly stabilized in 35 minutes, HP 2990. Mud before test 9.8#/gallon, 3400 (t) salinity.</p>	Feet of Fluid	Description	Cut.	Gravity	510 (7.3)	Gas Cut Oil	100% oil	41°	150 (2.1)	Heavily oil and gas cut mud			180 (2.6)	Gas Cut Oil	100% oil	41°	480 (3.7)	Heavily oil and gas cut mud	No sample - fluid unloaded		120 (0.5)	Oil	100% oil	41°
Feet of Fluid	Description	Cut.	Gravity																								
510 (7.3)	Gas Cut Oil	100% oil	41°																								
150 (2.1)	Heavily oil and gas cut mud																										
180 (2.6)	Gas Cut Oil	100% oil	41°																								
480 (3.7)	Heavily oil and gas cut mud	No sample - fluid unloaded																									
120 (0.5)	Oil	100% oil	41°																								
8-31		5602	<p>Circulated 4 hours and ran Schlumberger Electric log, Gamma Ray-Neutron log, Microlog, and Laterolog. (Completed 9-1-56).</p>																								

CONDITION AT BEGINNING OF PERIOD				
HOLE			CASING SIZE	DEPTH SET
SIZE	FROM	TO		
DRILL PIPE SIZES				

J. Richard Anklaam

SIGNED

Wildcat

DRILLING REPORT

FOR PERIOD ENDING

North Desert Creek

(FIELD)

(SECTION OR LEASE)

San Juan, Utah

September 6, 1956

T. 41 S., R. 23 E., SLBM

(COUNTY)

(TOWNSHIP OR RANCHO)

DAY	DEPTHS		REMARKS																																			
	FROM	TO																																				
9-1	5602	5606	<p>Measured pipe while going in hole for DST #4. New recorded depth, 5606 (was 5602). This is the same as Schlumberger's T.D. Circulated for two hours prior to running DST #4. Ran DST #4 (5570-5606), Johnston testers (completed test 9-2-56). Ran tester with 6-5/8" Bob Tail packers at 5564 and 5570, two outside pressure recorders, 3/4" subsurface bean and 1" surface bean, perforations 5570-5606, no air cushion. Tool open 2 hours, shut in 1 hour 30 minutes. Faint blow immediately, weak blow 35 minutes, moderate blow 56 minutes and maintained for balance of test. Recovered fluid as follows:</p> <table><thead><tr><th>Recovery Feet</th><th>Bbls.</th><th>Description</th><th>Cut</th><th>Salinity (t) ppm</th><th>Gravity °API</th><th>Wt. #/gal.</th></tr></thead><tbody><tr><td>50</td><td>.20</td><td>Slightly oil</td><td>98% mud</td><td>3800</td><td>-</td><td>7.8</td></tr><tr><td></td><td></td><td>gassy cut mud</td><td>2% oil</td><td></td><td></td><td></td></tr><tr><td>90</td><td>.35</td><td>Slightly oil</td><td>95% mud</td><td>3800</td><td>-</td><td>7.8</td></tr><tr><td></td><td></td><td>gassy cut mud</td><td>5% oil</td><td></td><td></td><td></td></tr></tbody></table> <p>IFP 80, FFP 120, SIP (not st. 90 min.), HP 2960.</p> <p>Mud before test 9.7#/gal., 3200 ppm.</p>	Recovery Feet	Bbls.	Description	Cut	Salinity (t) ppm	Gravity °API	Wt. #/gal.	50	.20	Slightly oil	98% mud	3800	-	7.8			gassy cut mud	2% oil				90	.35	Slightly oil	95% mud	3800	-	7.8			gassy cut mud	5% oil			
Recovery Feet	Bbls.	Description	Cut	Salinity (t) ppm	Gravity °API	Wt. #/gal.																																
50	.20	Slightly oil	98% mud	3800	-	7.8																																
		gassy cut mud	2% oil																																			
90	.35	Slightly oil	95% mud	3800	-	7.8																																
		gassy cut mud	5% oil																																			
9-2	5606	5624	<p>Drilled 18'. Note: Released Rotary Engineer 9:45 P.M., 9-1-56. Ran DST #5, 5557-5606, Johnston testers. Ran tester with 6-5/8" Bob Tail packers at 5551 and 5557, 4 outside pressure recorders, 3/4" subsurface bean and 1" surface bean, perforations 5557-5606, no air cushion. Tool open 2 hours 30 minutes, shut in 1 hour 30 minutes. Immediate moderate blow, gas to surface 3½ minutes, strong blow 5 minutes, oil to surface 15 minutes. Heavily gas cut oil flowed at the rate of +500 B/D. (No test tanks available, gauged with a 5 gal. bucket). Reverse circulated out. Only oil and gas in pipe. The oil is greenish, 41° API gravity, 0% water, 0.2% sediment. Mud before test 9.7#/gal., 3200 ppm. Gas rate 1300 MCF/D. IFP 480, FFP 1100, SIP 2200 (Stab. almost instantly), HP 2900. Reamed to bottom and then drilled to 5624.</p>																																			
9-3		5624	<p>Ran and cemented 5 1/2", 17# casing at 5624 with 250 sacks of construction cement, 15.2#/gal. slurry. Pumped 3 bbls. of water ahead of cement. Displaced with rig pump. Bumped plug with 1500 psi. Finished displacing 2:45 P.M. Measured and started picking up tubing, 2" (2-3/8" O.D.), 4.7#/ft.</p>																																			
CONDITION AT BEGINNING OF PERIOD																																						
HOLE			CASING SIZE	DEPTH SET																																		
SIZE	FROM	TO																																				
11"	0	1268	8-5/8"	1255																																		
7-7/8"	1268	5457																																				
7-3/4"	5457	5606																																				
DRILL PIPE 4½" F.H. SIZES			16.6#/ft.																																			

J. Richard Anklam

SIGNED

Wildcat

(FIELD)

San Juan, Utah

(COUNTY)

DRILLING REPORT

FOR PERIOD ENDING

WELL NO. 1

North Desert Creek

(SECTION OR LEASE)

T. 41 S., R. 23 E., S1E1M

(TOWNSHIP OR RANCHO)

DAY	DEPTHS		REMARKS
	FROM	TO	
9-4		5606	<p>Finished running in tubing, 183 joints, 5590.24' measured on walk or 5591' measured on hook. Drilled cement and baffle from 5582-5612. Ran neutron log with collar indicator. Perforated 5578-86 and 5590-98 (depths from Schlumberger log) with super casing jets, 4 holes per foot. Work by Lane Wells. Prior to logging and perforating, changed over from gypsum base mud to water. Set up separator and 25 barrels test tank.</p> <p>NOTE: Lane Wells neutron log (corrected to Schlumberger depth) shows top of cement at 5606 in casing.</p>
9-5		5606	<p>Removed B.O.P. Acidized with 500 gallons mud acid, 1500 gallons Petrofrac, and 2500 gallons Petrofrac with 1/2# sd/gal. Maintained 5000-6000 psi on fluid for 35 minutes before formation broke. Formation took fluid from 4:11 PM - 4:50 PM except for 17 minutes when pumps were down to avoid overheating the motor. Dowell made 6 runs swabbing to a depth of 3500 feet. Fluid began to flow on the 6th run.</p>
9-6		5606	<p>The first gauge (4:00 AM - 4:27 AM) showed a production rate of 1200 B/D with gas showing a 30 psi pressure on a 1" orifice. The gauge of 4:43 - 5:07 AM showed a production of 1320 B/L.</p> <p>The production stabilized at 6:00 AM at 1440 B/D, gas rate 950 MCF/D. The well was flowing through a 48/64" surface bean with a tubing pressure of 355-360 psi. The oil is greenish, 42° API gravity, and 0.3-0.4% sediment, no water. The well was shut in at 10:00 AM. Loffland Brothers Rig #139 released 3:00 PM.</p>
Loffland Bros. Company			
B.R. Beasley			
C.L. Boyle			
A.L. Hatch			
CONDITION AT BEGINNING OF PERIOD			
HOLE			DEPTH SET
SIZE	FROM	TO	
DRILL PIPE SIZES			

J. Richard Anklam

SIGNED

DITCH SAMPLES

Examined by Anklam 0 to 680
 to

Well North Desert Creek 1
 Field or Area North Desert Creek

FROM	TO	%	SHOWS UNDERLINED	SAMPLES KKKKK NOT LAGGED
0	40		No Samples.	
40	60	100	<u>Sandstone</u> , light brown to white, slightly calcareous, very fine.	
60	100	100	<u>Sandstone</u> , light tan to red brown, calcareous.	
100	140	20	<u>Sandstone</u> , as above.	
		80	<u>Shale</u> , brownish purple.	
140	160	100	<u>Shale</u> , as above.	
160	180	80	<u>Sandstone</u> , (grains) very poor sample.	
		20	<u>Shale</u> , as above.	
180	200	100	<u>Shale</u> , as above.	
200	240	90	<u>Sand grains</u>	
		10	<u>Shale</u> , as above.	
240	250	100	<u>Shale</u> , as above.	
250	300	60	<u>Sand grains</u>	
		40	<u>Shale</u> , as above.	
300	380	75	<u>Shale</u> , as above.	
		25	<u>Sandstone</u>	
380	400	60	<u>Sandstone</u> , tan	
		40	<u>Shale</u> , purple	
400	640	50	<u>Sandstone</u> , as above.	
		20	<u>Sandstone</u> , green.	
		30	<u>Shale</u> , purple to brown.	
640	660	80	<u>Shale</u> , purple to brown.	
		20	<u>Sandstone</u> , red orange.	
660	680	50	<u>Sandstone</u> , light orange tan.	
		50	<u>Sandstone</u> , red orange.	

DITCH SAMPLES

Examined by J.M. Burns 680 to 1160
J.R. Anklam _____ to _____

Well North Desert Creek 1
 Field or Area North Desert Creek

FROM	TO	%	SHOWS UNDERLINED	SAMPLES KKKKK NOT LAGGED
680	700	40	<u>Sandstone</u> , red orange.	
		40	<u>Sandstone</u> , tan.	
		20	<u>Shale</u> , as above.	
700	740	80	<u>Sandstone</u> , red orange.	
		20	<u>Shale</u> , as above.	
740	920	100	<u>Sandstone</u> , white to orange tan.	
920	940	80	<u>Sandstone</u> , as above.	
		20	<u>Shale</u> , dark brown mottled green.	
940	960	80	<u>Sandstone</u> , as above.	
		20	<u>Shale</u> , dark brown.	
960	980	75	<u>Shale</u> , as above.	
		25	<u>Sandstone</u> , as above.	
980	1000	60	<u>Shale</u> , as above.	
		40	<u>Shale</u> , light green.	
1000	1020	80	<u>Shale</u> , dark brown.	
		20	<u>Sandstone</u> , orange red.	
1020	1260		No Sample.	
1260	1360	100	Cement.	
1360	1390	100	Cement, trace sandstone.	
1390	1410	95	Cement.	
		5	<u>Sandstone</u> .	
1410	1420	75	Cement.	
		25	<u>Sandstone</u> .	
1420	1450		No Samples.	
1450	1460	90	<u>Sandstone</u> .	
		10	<u>Cement</u>	

DITCH SAMPLES

Examined by J.R. Anklaam 1460 to _____
 _____ to _____

Well North Desert Creek 1
 Field or Area North Desert Creek

FROM	TO	%	SHOWS UNDERLINED	SAMPLES LAGGED NOT LAGGED
1460	1470	100	<u>Sandstone</u> , very fine, silty.	
1470	1500	100	<u>Siltstone</u> , very sandy.	
1500	1540	100	<u>Siltstone</u> , sandy, calcareous, red orange.	
1540	1630	100	<u>Siltstone</u> , red brown.	
1630	1700	100	<u>Siltstone</u> , as above, dark brown in part.	
1700	1790		No samples.	
1790	2090	100	<u>Siltstone</u> , tan, red brown, calcareous.	
2090	2170	95	<u>Siltstone</u> , slightly sandy.	
		5	<u>Siltstone</u> , very calcareous.	
2170	2190	90	<u>Siltstone</u> , as above.	
		10	<u>Limestone</u> , III/I VFA, very argillaceous.	
2190	2240	75	<u>Siltstone</u> , as above.	
		25	<u>Limestone</u> , as above.	
2240	2260	75	<u>Limestone</u> , as above.	
		25	<u>Siltstone</u> , as above.	
2260	2300	30	<u>Limestone</u> , as above.	
		70	<u>Siltstone</u> , as above.	
2300	2340	85	<u>Siltstone</u> , as above.	
		15	<u>Limestone</u> , as above.	
2340	2370	85	<u>Siltstone</u> , as above.	
		15	<u>Sandstone</u> , medium coarse grain.	
2370	2380	70	<u>Siltstone</u> , as above.	
		25	<u>Sandstone</u> , coarse grain.	
		5	<u>Sand grains</u> , coarse to very coarse.	

DITCH SAMPLES

Examined by J.R. Ankham 2380 to 3460
_____ to _____Well North Desert Creek 1
Field or Ared North Desert Creek

FROM	TO	%	SHOWS UNDERLINED	SAMPLES LAGGED NOT LAGGED
2380	2400	80	<u>Shale</u> , light gray, soft, arenaceous, bentonite, slightly calcareous.	
		20	<u>Sandstone</u> , medium-coarse, poorly sorted, angular, slightly calcareous.	
2400	2410	100	<u>Shale</u> , as above.	
2410	2430	100	<u>Shale</u> , light gray green, silty.	
2430	2460	100	<u>Sandstone</u> , light green, very fine-fine, sub-round with abundant mica flakes, very slightly calcareous.	
2460	2470	75	<u>Sandstone</u> , as above.	
		25	<u>Shale</u> , gray	
2470	2560		No Samples.	
2560	2580	100	<u>Sandstone</u> , very fine grain, very calcareous.	
2580	2600	100	<u>Shale</u> .	
2600	2730	100	<u>Sandstone</u> , fine grain, calcareous.	
2730	2880	100	<u>Siltstone</u> , sandy.	
2880	2900	100	<u>Shale</u> .	
2900	3100	60	<u>Siltstone</u> .	
		40	<u>Shale</u> .	
3100	3120	100	<u>Siltstone</u> , grading to very fine <u>sandstone</u> .	
3120	3130	75	<u>Siltstone</u> , as above.	
		25	<u>Shale</u> .	
3130	3160	100	<u>Siltstone</u> , grading to <u>sandstone</u> .	
3160	3180	100	<u>Shale</u> .	
3180	3320	85	<u>Siltstone</u> .	
		15	<u>Shale</u>	
3320	3340	100	<u>Siltstone</u>	
3340	3460	70	<u>Siltstone</u>	
		30	<u>Shale</u>	

DITCH SAMPLES

Examined by J.R. Ankla 3460 to 3700
_____ to _____Well North Desert Creek 1
Field or Area North Desert Creek

FROM	TO	%	SHOWS UNDERLINED	SAMPLES LAGGED NOT LAGGED
3460	3470	100	<u>Shale</u> , red brown, mottled green, silty with anhydrite inclusions, slightly calcareous.	
3470	3480	100	<u>Shale</u> , as above.	
3480	3500	100	<u>Shale</u> , red brown, green, purple.	
3500	3510	50	<u>Shale</u> , red blocky, calcareous.	
		50	<u>Siltstone</u> , red brown, micaceous, anhydritic.	
3510	3530	100	<u>Shale</u> , as above, mottled green.	
3530	3540	25	<u>Shale</u> , green, soft.	
		75	<u>Shale</u> , as above.	
3540	3560	100	<u>Shale</u> , red, red brown, green, purple.	
3560	3570	100	<u>Shale</u> , brick red, blocky, calcareous.	
3570	3580	100	<u>Shale</u> , brown, fissile, micaceous, calcareous.	
3580	3590	100	<u>Shale</u> , brick red, blocky, slightly calcareous, arenaceous.	
3590	3600	50	<u>Shale</u> , as above.	
		50	<u>Shale</u> , green, blocky, micaceous, calcareous.	
3600	3620	50	<u>Shale</u> , red, as above.	
		50	<u>Siltstone</u> , brown, micaceous, anhydrite inclusions.	
3620	3630		Skip.	
3630	3640	100	<u>Shale</u> , red brown, mottled green with anhydrite inclusions, slightly calcareous.	
3640	3650	100	<u>Siltstone</u> , light green, calcareous, micaceous.	
3650	3670	50	<u>Shale</u> , red brown.	
		50	<u>Siltstone</u> , brown, micaceous, calcareous.	
3670	3680	75	<u>Siltstone</u> , as above.	
		25	<u>Limestone</u> , dark gray, IVFA.	
3680	3700	100	<u>Siltstone</u> , as above.	

DITCH SAMPLES

Examined by J. R. Ankley 3700 to 3900
_____ to _____Well North Desert Creek 1
Field or Area North Desert Creek

FROM	TO	%	SHOWS UNDERLINED	SAMPLES LAGGED NOT LAGGED
3700	3720	100	<u>Siltstone</u> , brown, micaceous, slightly calcareous.	
3720	3730	25	<u>Shale</u> , brick red.	
		75	<u>Siltstone</u> , as above.	
3730	3740	25	<u>Sandstone</u> , white very fine, micaceous.	
		25	<u>Siltstone</u> , as above.	
		50	<u>Shale</u> , brick red, calcareous.	
3740	3750	100	<u>Shale</u> , red brown, blocky, calcareous.	
3750	3770	100	<u>Sandstone</u> , light-medium brown, very fine, silty, micaceous, calcareous, argillaceous.	
3770	3780	75	<u>Shale</u> , varicolored, red, brown, green, purple.	
		25	<u>Sandstone</u> , as above.	
3780	3790	100	<u>Siltstone</u> , brown, calcareous, micaceous with anhydrite inclusions.	
3790	3800	100	<u>Shale</u> , red, brown, green, calcareous.	
3800	3830	100	<u>Siltstone</u> , brown, calcareous, white with anhydrite inclusions.	
3830	3840	25	<u>Limestone</u> , dark gray, IVFA, argillaceous.	
		75	<u>Siltstone</u> , as above.	
3840	3850	100	<u>Shale</u> , red, green, gray, green.	
3850	3860	25	<u>Limestone</u> , medium-dark, gray, IVFA, argillaceous.	
		75	<u>Siltstone</u> , as above.	
3860	3880	75	<u>Shale</u> , red, brown, green.	
		25	<u>Limestone</u> , light gray-black.	
3880	3890	25	<u>Limestone</u> , light gray, IVFA.	
		75	<u>Siltstone</u> , brown, calcareous.	
3890	3900	50	<u>Limestone</u> , as above.	
		50	<u>Shale</u> , red, brown, green, purple.	

DITCH SAMPLES

Examined by J.R. Ankles 3900 to 4070
_____ to _____Well North Desert Creek 1
Field or Area North Desert Creek

FROM	TO	%	SHOWS UNDERLINED	SAMPLES	LAGGED	NOT LAGGED
3900	3930	100	<u>Shale</u> , red, brown, green, purple.			
3930	3940	50	<u>Shale</u> , as above			
		50	<u>Limestone</u> , light gray, IVFA, argillaceous			
3940	3950	25	<u>Limestone</u> , as above.			
		75	<u>Siltstone</u> , green, calcareous.			
3950	3960	25	<u>Limestone</u> , as above.			
		75	<u>Shale</u> , light green, shows fissility.			
3960	3970	25	<u>Shale</u> , red, calcareous.			
		75	<u>Siltstone</u> , brown, calcareous.			
3970	3980	75	<u>Shale</u> , red, brown, green.			
		25	<u>Siltstone</u> , as above.			
3980	3990	75	<u>Shale</u> , as above.			
		25	<u>Limestone</u> , light - dark, gray, I-IIIIVFA, argillaceous.			
3990	4000	100	<u>Limestone</u> , light gray, IVFA.			
4000	4010	50	<u>Shale</u> , red, brown, green, arenaceous in part.			
		50	<u>Limestone</u> , as above.			
4010	4020	100	<u>Shale</u> , as above.			
4020	4030	50	<u>Shale</u> , gray, green, calcareous with <u>limestone</u> pebbles.			
		50	<u>Shale</u> , as above.			
4030	4040	100	<u>Shale</u> , gray, green, as above.			
4040	4050	50	<u>Shale</u> , as above.			
		50	<u>Shale</u> , red, brown, green.			
4050	4060	100	<u>Shale</u> , gray, green, calcareous, shows fissility with anhydrite inclusions.			
4060	4070	75	<u>Shale</u> , as above, varicolored.			
		25	<u>Limestone</u> , light gray-tan, IVFA.			

DITCH SAMPLES

Examined by J.R. Ankles 4070 to 4300
 _____ to _____

Well North Desert Creek 1
 Field or Area North Desert Creek

FROM	TO	%	SHOWS UNDERLINED	SAMPLES LAGGED NOT LAGGED
4070	4100	100	<u>Shale</u> , brown, red, gray, calcareous.	
4100	4110	100	<u>Shale</u> , red, brown, green.	
4110	4120	50	<u>Shale</u> , as above.	
		50	<u>Sandstone</u> , brown, very fine, argillaceous.	
4120	4130	100	<u>Shale</u> , as above.	
4130	4150	100	<u>Shale</u> , red, brown, calcareous, silty.	
4150	4160	50	<u>Shale</u> , as above.	
		50	<u>Shale</u> , light-medium gray, blocky, calcareous.	
4160	4170	100	<u>Shale</u> , red, red brown, gray.	
4170	4190	100	<u>Siltstone</u> , brown, calcareous.	
4190	4200	50	<u>Shale</u> , red, brown, green gray.	
		50	<u>Siltstone</u> , as above.	
4200	4210	100	<u>Siltstone</u> , brown, slightly calcareous.	
4210	4220	25	<u>Shale</u> , gray green.	
		75	<u>Siltstone</u> , as above.	
4220	4230	50	<u>Shale</u> , gray green.	
		50	<u>Shale</u> , red brown.	
4230	4240	100	<u>Shale</u> , gray green with black streaks in bedding, blocky shows fissility.	
4240	4250	25	<u>Shale</u> , as above.	
		75	<u>Limestone</u> , light medium gray, IVFA.	
4250	4260	100	<u>Limestone</u> , white-light gray, IVFA.	
4260	4270	100	<u>Siltstone</u> , brown, calcareous.	
4270	4280	25	<u>Limestone</u> , white-pink, IVFA.	
		75	<u>Siltstone</u> , as above.	
4280	4300	25	<u>Shale</u> , light gray, arenaceous, calcareous.	
		75	<u>Siltstone</u> , as above.	

DITCH SAMPLES

Examined by J.R. Ankla 4300 to 4350
_____ to _____Well North Desert Creek 1
Field or Area North Desert Creek

FROM	TO	%	SHOWS UNDERLINED	SAMPLES LAGGED NOT LAGGED
4300	4320	100	<u>Shale</u> , red brown, silty, calcareous.	
4320	4330	25	<u>Limestone</u> , pink-light gray, IVFA.	
		75	<u>Shale</u> , as above.	
4330	4340	100	<u>Shale</u> , as above.	
4340	4350	50	<u>Shale</u> , gray green, calcareous.	
		50	<u>Shale</u> , red brown, silty.	

DITCH SAMPLES

Examined by Anklam 4350 to 4385
_____ to _____Well North Desert Creek 1
Field or Area Wildcat

FROM	TO	%	SHOWS UNDERLINED	SAMPLES LAGGED NOT LAGGED
4350	4355	5	<u>Limestone</u> , tan to gray brown to gray green, I TFA, 2% yellow fluorescence no cut fluorescence.	
		5	<u>Limestone</u> , white to gray green, III/II VF-FA, sandy in part.	
		50	<u>Siltstone</u> , reddish brown to brown, sandy, calcareous, with inclusions white limestone (?).	
		40	<u>Shale</u> , variegated, calcareous in part.	
4355	4360	5	<u>Limestone</u> , I VFA and III/II VF-FA, as above, trace yellow fluorescence, no cut fluorescence in I VFA.	
		65	<u>Siltstone</u> , as above.	
		30	<u>Shale</u> , as above.	
4360	4365	60	<u>Siltstone</u> , as above.	
		40	<u>Shale</u> , as above.	
		Tr.	<u>Limestone</u> , tan to gray green, I VFA, trace pale yellow fluorescence, no cut fluorescence.	
		Tr.	<u>Anhydrite</u> .	
4365	4370	5	<u>Limestone</u> , tan to gray green, I VFA, 1% yellow fluorescence, no cut fluorescence.	
		45	<u>Siltstone</u> , as above.	
		50	<u>Shale</u> , as above.	
4370	4375	70	<u>Limestone</u> , tan to gray green, III/II VF-FA, with inclusions mica, very sandy.	
		20	<u>Siltstone</u> , as above.	
		10	<u>Shale</u> , as above.	
4375	4380	75	<u>Limestone</u> , tan to gray green, as above, trace very pale yellow fluorescence, no cut fluorescence.	
		15	<u>Shale</u> , as above.	
		10	<u>Siltstone</u> , as above.	
4380	4385	45	<u>Limestone</u> , tan to gray green, as above.	
		40	<u>Siltstone</u> , as above.	
		15	<u>Shale</u> , as above.	

DITCH SAMPLES

Examined by Anklam 4385 to 4420
_____ to _____Well North Desert Creek 1
Field or Area Wildcat

FROM	TO	%	SHOWS UNDERLINED	SAMPLES LAGGED NOT LAGGED
4385	4390	20	<u>Limestone</u> , tan to gray green, as above.	
		50	<u>Siltstone</u> , as above.	
		30	<u>Shale</u> , as above.	
4390	4395	5	<u>Limestone</u> , tan to gray green, as above.	
		75	<u>Siltstone</u> , as above.	
		20	<u>Shale</u> , as above.	
4395	4400	5	<u>Limestone</u> , tan to gray green, as above.	
		70	<u>Siltstone</u> , as above.	
		25	<u>Shale</u> , as above.	
4400	4405	70	<u>Siltstone</u> , reddish brown to brown, sandy, calcareous, with inclusions white limestone(?) and mica.	
		30	<u>Shale</u> , variegated, slightly calcareous in part.	
		Tr.	<u>Limestone</u> , tan to gray green, III/II VF-FA, with inclusions mica, very sandy to silty.	
		Tr.	<u>Limestone</u> , tan, I VFA.	
4405	4410	60	<u>Limestone</u> , tan to brown to gray green, III/II VF-FA with inclusions mica, grading to siltstone, sandy.	
		30	<u>Siltstone</u> , as above.	
		10	<u>Shale</u> , as above.	
		Tr.	<u>Limestone</u> , tan to gray green, I VFA.	
4410	4415	25	<u>Limestone</u> , grading to <u>siltstone</u> , as above.	
		60	<u>Siltstone</u> , as above, mottled green in part.	
		15	<u>Shale</u> , as above.	
		Tr.	<u>Limestone</u> , tan to green gray, I VFA.	
4415	4420	5	<u>Limestone</u> , tan to gray, I VFA.	
		5	<u>Limestone</u> , tan to gray green, III/II VF-FA, silty.	
		80	<u>Siltstone</u> , reddish brown to brown, sandy, calcareous, with inclusions mica, mottled green in part.	
		10	<u>Shale</u> , as above.	

DITCH SAMPLES

Examined by Anklam 4420 to 4460
_____ to _____Well North Desert Creek 1
Field or Area Wildcat

FROM	TO	%	SHOWS UNDERLINED	SAMPLES 4455-4460 NOT LAGGED
4420	4425	5	<u>Limestone</u> , white to gray green to tan, III/II VF-FA, silty to sandy.	
		65	<u>Siltstone</u> , as above.	
		30	<u>Shale</u> , as above.	
4425	4430	65	<u>Siltstone</u> , as above.	
		35	<u>Shale</u> , as above.	
		Tr.	<u>Limestone</u> , tan green, I VFA.	
		Tr.	<u>Limestone</u> , gray green, III/II VF-FA, silty.	
4430	4440	5	<u>Limestone</u> , gray green, III/II VF-FA, silty.	
		30	<u>Siltstone</u> , as above.	
		65	<u>Shale</u> , as above.	
		Tr.	<u>Limestone</u> , tan, I VFA.	
4440	4445	5	<u>Limestone</u> , gray green, III/II VF-FA, silty.	
		30	<u>Siltstone</u> , as above, with inclusions white <u>limestone</u> (?).	
		65	<u>Shale</u> , as above.	
		Tr.	<u>Limestone</u> , tan, I VFA.	
4445	4450	5	<u>Limestone</u> , tan to tan green, III/II VF-FA, silty.	
		50	<u>Shale</u> , as above.	
		45	<u>Siltstone</u> , as above, with inclusions white <u>limestone</u> (?).	
4450	4455	75	<u>Siltstone</u> , reddish brown to brown, sandy in part, calcareous in part, inclusions mica and white material, mottled green in part.	
		25	<u>Shale</u> , variegated, calcareous.	
		Tr.	<u>Limestone</u> , tan to gray green, III/II VF-FA, sandy to silty, trace pale yellow fluorescence, no cut fluorescence.	
		Tr.	<u>Dolomite</u> , light tan, I/II VFA.	
4455	4460	10	<u>Limestone</u> , tan to tan green, III/I VFA, silty.	
		50	<u>Siltstone</u> , as above.	
		40	<u>Shale</u> , as above.	
		Tr.	<u>Limestone</u> , tan, III/II, dolomitic, silty.	

DITCH SAMPLES

Examined by Anklam 4460 to 4475
Eskelsen 4475 to 4520

Well North Desert Creek No. 1
 Field or Area Wildcat

FROM	TO	%	SHOWS UNDERLINED	SAMPLES LAGGED NOT LAGGED
4460	4465	10	<u>Limestone</u> , tan gray to gray green, III/I VFA, silty.	
		5	<u>Dolomite</u> , white to light tan, II A, silty.	
		55	<u>Siltstone</u> , as above.	
		30	<u>Shale</u> , as above.	
4465	4470	5	<u>Limestone</u> , tan gray to gray green, III/II VF-FA, silty.	
		50	<u>Siltstone</u> , as above.	
		45	<u>Shale</u> , as above.	
4470	4475	70	<u>Limestone</u> , white to tan gray, I/III VFA, dolomitic in part, silty, trace chert.	
		20	<u>Siltstone</u> , as above.	
		10	<u>Shale</u> , as above.	
4475	4480	50	<u>Shale</u> , gray, sub fissile, calcareous.	
		50	<u>Limestone</u> , white to light gray, I VFA, slightly arenaceous, cherty, fossiliferous ?.	
4480	4485	50	<u>Shale</u> , variegated, reddish brown, gray green.	
		50	<u>Limestone</u> , light gray to tan, I VFA.	
4485	4490	75	<u>Shale</u> , as above.	
		25	<u>Limestone</u> , as above.	
4490	4495	75	<u>Shale</u> , gray green, calcareous.	
		25	<u>Limestone</u> , as above.	
4495	4500	50	<u>Shale</u> , gray green.	
		50	<u>Shale</u> , reddish brown.	
4500	4505	75	<u>Shale</u> , variegated, reddish brown to gray green.	
		25	<u>Limestone</u> , olive, I VFA.	
4505	4515	25	<u>Shale</u> , gray green.	
		75	<u>Shale</u> , reddish brown.	
4515	4520	75	<u>Shale</u> , as above.	
		25	<u>Limestone</u> , light gray, I VFA.	

DITCH SAMPLES

Examined by Eskelsen 4520 to 4620
_____ to _____Well North Desert Creek 1
Field or Area _____

FROM	TO	%	SHOWS UNDERLINED	SAMPLES LAGGED NOT LAGGED
4520	4525		No Samples	
4525	4535	75	<u>Shale</u> , reddish brown, blocky, calcareous.	
		25	<u>Sandstone</u> , white, fine to medium grained, subround, calcareous.	
4535	4550	50	<u>Shale</u> , as above.	
		50	<u>Sandstone</u> , as above.	
4550	4555	75	<u>Shale</u> , gray green, blocky, calcareous.	
		25	<u>Sandstone</u> , white to gray green, very fine to medium grained, subround, calcareous.	
4555	4560	75	<u>Shale</u> , variegated gray green, red brown.	
		25	<u>Sandstone</u> , as above.	
4560	4565	25	<u>Shale</u> , as above.	
		75	<u>Sandstone</u> , light brown, very fine grained, calcareous, micaceous.	
4565	4570	100	<u>Sandstone</u> , as above.	
4570	4580	50	<u>Shale</u> , reddish brown, blocky, calcareous.	
		50	<u>Sandstone</u> , as above.	
4580	4585	50	<u>Shale</u> , as above.	
		50	<u>Sandstone</u> , as above, light brown to light green.	
4585	4590	75	<u>Shale</u> , gray green, blocky, calcareous.	
		25	<u>Sandstone</u> , light green, very fine grained, calcareous.	
4590	4595	100	<u>Sandstone</u> , light gray to brown, silty to very fine grained, calcareous, argillaceous.	
4595	4600	100	<u>Shale</u> , medium gray, blocky, calcareous.	
4600	4605	100	<u>Limestone</u> , white to light gray, I VFA.	
4605	4610	75	<u>Shale</u> , medium gray, blocky, calcareous.	
		25	<u>Limestone</u> , as above.	
4610	4615	100	<u>Shale</u> , as above.	
4615	4620	75	<u>Shale</u> , as above.	
		25	<u>Limestone</u> , light gray, I VFA.	

DITCH SAMPLES

Examined by Eskelsen 4620 to 4725
toWell North Desert Creek 1
Field or Area

FROM	TO	%	SHOWS UNDERLINED	SAMPLES LAGGED NOT LAGGED
4620	4625	100	<u>Shale</u> , as above.	
4625	4630	75	<u>Shale</u> , reddish brown, blocky, calcareous.	
		25	<u>Limestone</u> , light gray, I VFA.	
4630	4635	100	<u>Shale</u> , as above.	
4635	4640	90	<u>Shale</u> , as above.	
		10	<u>Limestone</u> , light gray, I VFA.	
4640	4650	75	<u>Shale</u> , as above.	
		25	<u>Limestone</u> , as above.	
4650	4670	75	<u>Shale</u> , as above.	
		25	<u>Shale</u> , medium gray, blocky, very calcareous, micaceous.	
4670	4675		No Sample.	
4675	4680	100	<u>Limestone</u> , white, I VFA, arenaceous.	
4680	4685	50	<u>Shale</u> , reddish brown.	
		50	<u>Limestone</u> , white to light gray, I VFA, arenaceous.	
4685	4690	75	<u>Shale</u> , as above.	
		25	<u>Limestone</u> , as above.	
4690	4695	75	<u>Shale</u> , as above.	
		25	<u>Limestone</u> , light gray, I VFA, fossiliferous, argillaceous.	
4695	4700	100	<u>Shale</u> , variegated reddish brown, gray green.	
4700	4705	100	<u>Shale</u> , medium gray, blocky, calcareous.	
4705	4710	100	<u>Shale</u> , reddish brown, calcareous.	
4710	4715	50	<u>Shale</u> , as above.	
		50	<u>Shale</u> , medium gray, calcareous, siliceous in part.	
4715	4720	50	<u>Shale</u> , medium gray, calcareous.	
		50	<u>Limestone</u> , light gray to tan, I VFA.	
4720	4725	100	<u>Limestone</u> , white to light gray, I VFA, arenaceous, cherty.	

DITCH SAMPLES

Examined by Eskelsen 4725 to 4845
_____ to _____Well North Desert Creek 1
Field or Area _____

FROM	TO	%	SHOWS UNDERLINED	SAMPLES LAGGED NOT LAGGED
4725	4730	75	<u>Shale</u> , reddish brown, calcareous.	
		25	<u>Limestone</u> , light to medium gray, I VFA, cherty.	
4730	4745	100	<u>Shale</u> , variegated reddish brown, medium gray, gray green.	
4745	4750	50	<u>Shale</u> , as above.	
		50	<u>Limestone</u> , light to medium gray, I VFA, slightly argillaceous.	
4750	4755	75	<u>Shale</u> , reddish brown, calcareous.	
		25	<u>Limestone</u> , tan, I VFA.	
4755	4760	75	<u>Shale</u> , as above.	
		25	<u>Limestone</u> , light to medium gray, I VFA, very argillaceous in part.	
4760	4765	100	<u>Limestone</u> , light to medium gray, I-III VF-MA.	
4765	4770	100	<u>Limestone</u> , as above, I-III VF-FA.	
4770	4790	100	<u>Shale</u> , reddish brown, calcareous.	
4790	4800	75	<u>Shale</u> , as above.	
		25	<u>Limestone</u> , light gray, I VFA.	
4800	4810	50	<u>Shale</u> , as above.	
		25	<u>Shale</u> , medium gray, calcareous.	
		25	<u>Limestone</u> , as above.	
4810	4815	50	<u>Shale</u> , reddish brown.	
		50	<u>Limestone</u> , light gray, I VFA.	
4815	4830	75	<u>Shale</u> , as above.	
		25	<u>Limestone</u> , as above, with red chert.	
4830	4835		No Sample.	
4835	4840	75	<u>Shale</u> , variegated reddish brown, medium gray, gray green.	
		25	<u>Limestone</u> , white to light gray, I VFA, cherty.	
4840	4845	75	<u>Limestone</u> , as above.	
		25	<u>Chert</u> .	

DITCH SAMPLES

Examined by Eskelsen 4845 to 4940
_____ to _____Well North Desert Creek 1
Field or Area _____

FROM	TO	%	SHOWS UNDERLINED	SAMPLES LAGGED NOT LAGGED
4845	4850	100	<u>Limestone</u> , white to light gray, I VFA, very cherty.	
4850	4855	50	<u>Shale</u> , medium gray, calcareous.	
		50	<u>Limestone</u> , as above.	
4855	5860	75	<u>Shale</u> , as above.	
		25	<u>Limestone</u> , as above.	
5860	5865	25	<u>Shale</u> , gray green to black, slightly calcareous.	
		75	<u>Limestone</u> , light gray to tan, I VFA.	
5865	5870	100	<u>Limestone</u> , light gray, I VFA.	
5870	5885	75	<u>Shale</u> , medium gray, calcareous.	
		25	<u>Limestone</u> , as above.	
5885	5890	50	<u>Shale</u> , as above.	
		50	<u>Limestone</u> , medium gray, I/III VF-FA.	
5890	4900	100	<u>Limestone</u> , light to medium gray, I VFA, very arenaceous, micaceous.	
4900	4905	50	<u>Shale</u> , medium gray, calcareous.	
		50	<u>Limestone</u> , as above.	
4905	4920	75	<u>Shale</u> , varicolored red brown gray.	
		25	<u>Limestone</u> , medium gray, I VFA.	
4920	4925	50	<u>Shale</u> , red brown, calcareous.	
		50	<u>Limestone</u> , light to medium gray, I VFA.	
4925	4930	50	<u>Shale</u> , varicolored red brown, medium gray.	
		50	<u>Limestone</u> , as above.	
4930	4935	50	<u>Shale</u> , medium gray, calcareous.	
		50	<u>Limestone</u> , medium gray to tan, I VFA.	
4935	4940	75	<u>Shale</u> , as above.	
		25	<u>Limestone</u> , as above, with dark gray chert fragments.	

DITCH SAMPLES

Examined by Eskelsen 4940 to 5050
_____ to _____Well North Desert Creek 1
Field or Area _____

FROM	TO	%	SHOWS UNDERLINED	SAMPLES LAGGED NOT LAGGED
4940	4945	50	<u>Shale</u> , as above.	
		50	<u>Limestone</u> , medium gray to tan, I VFA.	
4945	4950	100	<u>Shale</u> , varicolored red brown to medium gray.	
4950	4960	75	<u>Shale</u> , medium gray, calcareous.	
		25	<u>Limestone</u> , white to medium gray, I VFA.	
4960	4965	100	<u>Shale</u> , medium to dark gray, calcareous.	
4965	4970	75	<u>Shale</u> , as above.	
		25	<u>Limestone</u> , medium gray, I VFA, very argillaceous.	
4970	4975	50	<u>Shale</u> , as above.	
		50	<u>Limestone</u> , as above.	
4975	4980	100	<u>Limestone</u> , light to medium gray, I VFA.	
4980	4990	100	<u>Limestone</u> , light gray, I VFA, chert fragments.	
4990	4995		No Samples.	
4995	5000	100	<u>Limestone</u> , light to medium gray, I VFA.	
5000	5005	100	<u>Limestone</u> , medium gray to tan, I VFA, silty, minor milky chert.	
5005	5010	100	<u>Limestone</u> , as above, no chert.	
5010	5015	100	<u>Limestone</u> , medium gray to tan, I VFA, silty, minor milky chert.	
5015	5020	100	<u>Shale</u> , variegated red brown, medium gray.	
5020	5025	50	<u>Shale</u> , medium gray, calcareous.	
		50	<u>Limestone</u> , dark gray, I VFA, very argillaceous.	
5025	5035	100	<u>Limestone</u> , light gray to tan, I VFA.	
5035	5040	75	<u>Shale</u> , variegated red brown, medium gray.	
		25	<u>Limestone</u> , as above.	
5040	5045	100	<u>Shale</u> , as above.	
5045	5050	25	<u>Shale</u> , as above.	
		75	<u>Limestone</u> , white to tan, I VFA.	

DITCH SAMPLES

Examined by Eskelsen 5050 to 5175
_____ to _____Well North Desert Creek 1
Field or Area _____

FROM	TO	%	SHOWS UNDERLINED	SAMPLES L AGGED NOT LAGGED
5050	5060	75	<u>Shale</u> , variegated purple, gray green, gray, red brown.	
		25	<u>Limestone</u> , as above.	
5060	5065	100	<u>Shale</u> , variegated red brown, medium gray.	
5065	5070	75	<u>Shale</u> , medium gray.	
		25	<u>Limestone</u> , dark gray, I VFA, very argillaceous.	
5070	5075	75	<u>Shale</u> , as above.	
		25	<u>Limestone</u> , light gray, I VFA.	
5075	5085	100	<u>Shale</u> , medium gray, calcareous.	
5085	5090	100	<u>Limestone</u> , white, I VFA, silty.	
5090	5095	50	<u>Shale</u> , medium to dark gray, calcareous.	
		50	<u>Limestone</u> , as above.	
5095	5100	25	<u>Shale</u> , as above.	
		75	<u>Limestone</u> , white to medium gray, I VFA.	
5100	5105	50	<u>Shale</u> , as above.	
		50	<u>Limestone</u> , as above.	
5105	5125	100	<u>Shale</u> , medium to dark gray, sub-fissile, blocky, calcareous.	
5125	5135	75	<u>Shale</u> , as above.	
		25	<u>Limestone</u> , light gray, I VFA.	
5135	5145	100	<u>Limestone</u> , light gray to tan, I VFA, slightly silty.	
5145	5155	25	<u>Shale</u> , medium to dark gray, calcareous.	
		75	<u>Limestone</u> , as above.	
5155	5160		No Samples.	
5160	5165	100	<u>Limestone</u> , light gray, I VFA.	
5165	5170	100	<u>Limestone</u> , light gray to tan, I VFA.	
5170	5175	100	<u>Limestone</u> , as above, cherty, silty.	

DITCH SAMPLES

Examined by Eskelsen 5175 to 5250
_____ to _____Well North Desert Creek 1
Field or Area _____

FROM	TO	%	SHOWS UNDERLINED	SAMPLES LAGGED NOT LAGGED
5175	5180	25	<u>Shale</u> , dark gray, calcareous.	
		75	<u>Limestone</u> , as above.	
5180	5185	25	<u>Shale</u> , as above.	
		75	<u>Limestone</u> , tan to dark gray, I VFA, silty, very argillaceous.	
5185	5190	50	<u>Shale</u> , as above.	
		50	<u>Limestone</u> , as above.	
5190	5195	100	<u>Limestone</u> , light gray to tan, I VFA, cherty, dark gray to brown.	
5195	5200	25	<u>Shale</u> , dark gray, calcareous.	
		75	<u>Limestone</u> , as above.	
5200	5205	50	<u>Shale</u> , dark gray, calcareous.	
		50	<u>Limestone</u> , light gray, I VFA.	
5205	5210	100	<u>Limestone</u> , light gray, I VFA.	
5210	5215	75	<u>Shale</u> , dark gray, calcareous.	
		25	<u>Limestone</u> , as above.	
5215	5220	100	<u>Limestone</u> , white to light gray, I VFA, arenaceous.	
5220	5225	100	<u>Limestone</u> , as above, cherty.	
5225	5230	50	<u>Shale</u> , dark gray, calcareous.	
		50	<u>Limestone</u> , as above.	
5230	5235	50	<u>Shale</u> , as above.	
		50	<u>Limestone</u> , light gray to tan, I-III VFA.	
5235	5240	50	<u>Shale</u> , as above.	
		50	<u>Limestone</u> , as above, cherty.	
5240	5245	25	<u>Shale</u> , as above.	
		75	<u>Limestone</u> , as above.	
5245	5250	75	<u>Shale</u> , medium to dark gray.	
		25	<u>Limestone</u> , light gray, I VFA, cherty.	

DITCH SAMPLES

Examined by Eskelsen 5250 to 5370
toWell North Desert Creek 1
Field or Area

FROM	TO	%	SHOWS UNDERLINED	SAMPLES LAGGED NOT LAGGED
5250	5255	25	<u>Shale</u> , as above.	
		75	<u>Limestone</u> , tan, I VFA, slightly arenaceous.	
5255	5260	50	<u>Shale</u> , as above.	
		50	<u>Limestone</u> , as above.	
5260	5265	25	<u>Shale</u> , dark gray, slightly calcareous.	
		75	<u>Limestone</u> , light gray to tan, I VFA, cherty.	
5265	5270	50	<u>Shale</u> , as above.	
		50	<u>Limestone</u> , tan to brown, I VFA, very argillaceous, cherty.	
5270	5275	25	<u>Shale</u> , as above.	
		75	<u>Limestone</u> , as above.	
5275	5280	100	<u>Shale</u> , medium to dark gray, slightly calcareous.	
5280	5285	25	<u>Shale</u> , as above.	
		75	<u>Limestone</u> , tan, I VFA.	
5285	5290	100	<u>Limestone</u> , light gray to tan, I VFA, arenaceous.	
5290	5300	50	<u>Shale</u> , dark gray, slightly calcareous.	
		50	<u>Limestone</u> , as above.	
5300	5310	75	<u>Shale</u> , as above.	
		25	<u>Limestone</u> , light gray, I VFA.	
5310	5325	100	<u>Limestone</u> , light gray, I VFA.	
5325	5335	100	<u>Limestone</u> , light gray to tan, I VFA.	
5335	5340	100	<u>Limestone</u> , tan, I VFA.	
5340	5350	100	<u>Limestone</u> , brown, I VFA, cherty.	
5350	5360	50	<u>Shale</u> , dark gray, blocky.	
		50	<u>Limestone</u> , as above, cherty.	
5360	5370	100	<u>Limestone</u> , brown, I VFA with occasional III/I F-M Trace B + C, appears brecciated, clear crystalline material possibly anhydrite filling veins, cherty, <u>5% of total sample pale yellow uniform to spotty fluorescence, milky white cut fluorescence.</u>	

DITCH SAMPLES

Examined by Eskelsen 5370 to 5455
_____ to _____Well North Desert Creek 1
Field or Area _____

FROM	TO	%	SHOWS UNDERLINED	SAMPLES LAGGED- NOT LAGGED
5370	5375	100	<u>Limestone</u> , brown, I/III VF-FA, very cherty, dark brown, <u>1% yellow fluorescence and cut fluorescence.</u>	
5375	5385	100	<u>Limestone</u> , brown, specked white, I VFA, very cherty, <u>trace fluorescence and cut fluorescence.</u>	
5385	5395	100	<u>Limestone</u> , brown, I VFA, argillaceous.	
5395	5400	100	<u>Limestone</u> , brown, I VFA, slightly argillaceous.	
5400	5405	25	<u>Shale</u> , dark gray, blocky.	
		75	<u>Limestone</u> , as above, in part arenaceous.	
5405	5410	25	<u>Shale</u> , as above.	
		75	<u>Limestone</u> , as above, with blue white chert.	
5410	5415	100	<u>Limestone</u> , gray to tan, I VFA, with blue white chert, arenaceous in part.	
5415	5420	100	<u>Limestone</u> , white to tan, I VFA, in part III VFA, <u>1% yellow uniform fluorescence and milky white fluorescence.</u>	
5420	5425	100	<u>Limestone</u> , tan, III VFA, in part III VF B ₇ Trace C, <u>30% yellow fluorescence and milky white cut fluorescence.</u>	
5425	5430	75	<u>Shale</u> , black, very soft, calcareous.	
		25	<u>Limestone</u> , as above, <u>with 5% fluorescence as above.</u>	
5430	5440	100	<u>Shale</u> , as above.	
5440	5445	50	<u>Shale</u> , black, soft, in part hard, calcareous.	
		50	<u>Limestone</u> , brown, I/III VFA, <u>10% fluorescence, yellow, and milky white cut fluorescence.</u> (Sample may be contaminated due to cleaning out baffle box.)	
5445	5450	100	<u>Limestone</u> , brown, III VF B ₁₋₅ C ₁₀ , oolitic (porosity appears to be dissolved oolites, may not be inter-connected), <u>strong yellow fluorescence 40% strong milky white cut fluorescence.</u> Sample has strong petroliferous odor.	
5450	5455	70	<u>Limestone</u> , white, I VFA, soft.	
		30	<u>Limestone</u> , as above, <u>30% fluorescence and cut fluorescence.</u>	

SHELL OIL COMPANY

WEEK ENDING _____

AREA OR FIELD N. Desert CreekCORE FROM 5457 TO 5483

CORE RECORD

COMPANY Shell OilCORES EXAMINED BY Eskelsen

LEASE AND WELL NO. _____

NO.	FROM	TO	RECOVERED	FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE	SYMBOL	OBSERVED DIP	CORE INDICATIONS OIL - GAS
							CORE OR DITC
1	5457	5483	26'				See Description
	5457	5458	1'	<u>Limestone</u> , tan, IVF-CA, fossiliferous, <u>spotty oil staining, spotty yellow fluorescence, bleeding oil.</u>			
	5458	5459	1'	<u>Limestone</u> , as above. <u>Shows as above.</u>			
	5459	5459.5	.5'	<u>Limestone</u> , as above. <u>Shows as above.</u>			
	5459.5	5460	.5'	<u>Limestone</u> , tan, IVFA + B. <u>Uniform oil staining, uniform to spotty yellow fluorescence and cut fluorescence.</u>			
	5460	5461	1'	<u>Limestone</u> , tan, IVFA + B ₃ , <u>staining and fluorescence as above,</u>			
	5461	5462	1'	<u>Limestone</u> , as above, minor secondary calcite in veins. <u>Uniform oil staining and uniformed yellow fluorescence.</u>			
	5462	5463	1'	<u>Limestone</u> . IVFA + B ₃ , <u>shows as above.</u>			
	5463	5464	1'	<u>Limestone</u> , IVFA + B ₃ , <u>shows as above.</u>			
	5464	5465	1'	<u>Limestone</u> , IVFA + B ₅ , <u>shows as above.</u>			
	5465	5466	1'	<u>Limestone</u> , IVFA + B ₂ , <u>shows as above.</u>			
	5466	5467	1'	<u>Limestone</u> , IVFA + B ₁ , <u>shows as above.</u>			
	5467	5468	1'	<u>Limestone</u> , gray-brown, IVFA, very fossiliferous, <u>uniform oil staining uniform yellow fluorescence and cut fluorescence.</u>			
	5468	5469	1'	<u>Limestone</u> , as above. <u>Shows as above.</u>			
	5469	5471	2'	<u>Limestone</u> , IVFA + B _{tr}			
	5471	5472	1'	<u>Limestone</u> , gray, IVFA, <u>spotty oil staining, uniform to spotty fluorescence and cut fluorescence.</u>			

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). 5-SAND (90-100%).
NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

SHELL OIL COMPANY

WEEK ENDING _____

CORE FROM 5472 TO 5483CORES EXAMINED BY Eskelsen

CORE RECORD

AREA OR FIELD N. Desert CreekCOMPANY Shell OilLEASE AND WELL NO. 1

NO.	FROM	TO	RECOVERED	FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE	SYMBOL	OBSERVED DIP	CORE INDICATIONS OIL- GAS
							CORE OR DITCH
1	Cont'd						
	5472	5473	1'	<u>Limestone</u> , IVFA, black shale partings.			See Description
	5473	5474	1'	<u>Limestone</u> , IVFA, as above, <u>spotty oil staining, spotty fluorescence and cut fluorescence.</u>			
	5474	5475	1'	<u>Limestone</u> , IVFA, as above, <u>spotty to uniform oil staining, fluorescence and cut fluorescence.</u>			
	5475	5476	1'	<u>Limestone</u> , tan IVFA + C ₂ , <u>uniform oil staining, uniform fluorescence and cut fluorescence.</u>			
	5476	5479	3'	<u>Limestone</u> , tan IVFA + C ₅ , <u>oil staining and fluorescence as above.</u>			
	5479	5480	1'	<u>Limestone</u> , IVFA + C ₂ , <u>shows as above.</u>			
	5480	5481	1'	<u>Limestone</u> , IVFA + C ₂ , <u>spotty to uniform oil staining with fluorescence and cut fluorescence.</u>			
	5481	5483	2'	50% <u>Limestone</u> , light gray-black IVFA + B ₃ , 50% <u>chert</u> , black, in part white.			

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).

NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

SHELL OIL COMPANY

WEEK ENDING _____

CORE FROM 5483 TO 5486CORES EXAMINED BY Bacheller

CORE RECORD

AREA OR FIELD N. Desert CreekCOMPANY Shell OilLEASE AND WELL NO. 1

NO.	FROM	TO	RECOVERED	FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE	SYMBOL	OBSERVED DIP	CORE INDICATIONS OIL-GAS
							CORE OR DITCH
2	5483	5486	3'				
	5483	5484	1'	65% <u>Limestone</u> , medium brown - gray, III-I F-MA+B ₁ p. Slightly fractured. Bleeding oil from fractures and a few pores. Fossiliferous with a few crinoid rings, Shell fragments and micro-fossils (forams).			See Description
				35% <u>Chert</u> , light blue, mottled medium brown, translucent. Chert forms as stringers to 2" thick and blobs to 3" diameter.			
	5484	5485	1'	65% <u>Limestone</u> , as above, stylolitic in part, <u>bright yellow fluorescence</u> , <u>milky white cut fluorescence on fractures and in few pores</u> .			
				35% <u>Chert</u> as above.			
	5485	5486	1'	65% <u>Limestone</u> as above. <u>Shows as above</u> .			
				35% <u>Chert</u> , as above.			

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).

NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

SHELL OIL COMPANY

WEEK ENDING _____

CORE FROM 5487 TO 5517CORES EXAMINED BY Bacheller

CORE RECORD

AREA OR FIELD N. Desert CreekCOMPANY Shell OilLEASE AND WELL NO. 1

NO.	FROM	TO	RECOVERED	FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE	SYMBOL	OBSERVED DIP	CORE INDICATIONS OIL- GAS CORE OR DITC
3	5487	5517	30'				See Description
	5487	5488	1'	<u>Limestone</u> , medium brown - brown gray, III VF - MA, bioclastic in part, slightly argillaceous-stylolitic in part, brachiopods and crinoid stems or echnoid spines.			
	5488	5489	1'	<u>Limestone</u> , light medium brown, III M-LA + C _{tr} , bioclastic with argillaceous matrix. Matrix is also III VF-FA, fossiliferous as above. <u>Oil stained in part. Petroleum odor, uniform pale gold-yellow fluorescence and milky white cut fluorescence. Core bled slightly after warming up in sun.</u>			
	5489	5490	1'	<u>Limestone</u> , III M-LA + C _{tr} , as above. Whole small brachiopods, <u>good uniform oil staining, fluorescence and cut fluorescence as above.</u>			
	5490	5491	1'	<u>Limestone</u> , III VFA, becoming III FA + B ₁ . <u>Shows as above.</u>			
	5491	5492	1'	<u>Limestone</u> , III VFA + B ₁ as above with numerous crinoid rings. <u>Shows as above.</u>			
	5492	5493	1'	<u>Limestone</u> , III VFA + B ₁ , <u>shows as above.</u>			
	5493	5494	1'	<u>Limestone</u> , gray, brown, III VFA, medium argillaceous, <u>shows as above.</u>			
	5494	5495	1'	<u>Limestone</u> , III VFA slightly argillaceous, slightly fossiliferous, <u>slightly spotty oil staining, fluorescence and cut fluorescence.</u>			
	5495	5496	1'	<u>Limestone</u> , medium brown, III-IVFA, slightly argillaceous, stylolitic.			
	5496	5497	1'	60% <u>Shale</u> , dark gray brown-dark gray, medium calcite interbedded with and grading into limestone. 40% <u>Limestone</u> , dark brown gray, IVF-FA, very argillaceous.			
	5497	5498	1'	<u>Limestone</u> , dark gray brown, III FA, slightly argillaceous.			

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). 5-SAND (90-100%).

NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

SHELL OIL COMPANY

WEEK ENDING _____

CORE FROM _____

TO _____

CORES EXAMINED BY _____

Bacheller

CORE RECORD

AREA OR FIELD N. Desert Creek

COMPANY Shell Oil

LEASE AND WELL NO. 1

NO.	FROM	TO	RECOVERED	FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE	SYMBOL	OBSERVED DIP	CORE INDICATIONS OIL- GAS
							CORE OR DITCH
3	Cont'd 5498	5499	1'	<u>Limestone</u> , light gray, III MA, oolitic, thoroughly cemented with clear calcite.			See Description
	5499	5500	1'	<u>Limestone</u> , light gray - light gray brown, III F-MA + B ₂ + C _{tr} , psuedoolitic. Some fractures and vugs filled with calcite. <u>Good spotty gold - yellow fluorescence. Cut fluorescence, milky white. Oil staining is predominantly along vertical fractures. Core bled oil and salt water immediately. In some cases the porosity is interconnected, but generally appears not interconnected.</u>			
	5500	5501	1'	<u>Limestone</u> , III F-MA + B ₂ + C _{tr} as above. <u>Shows as above.</u>			
	5501	5502	1'	<u>Limestone</u> , light medium brown gray, III F- MA + B ₁ only rare vertical fractures. <u>Psuedoolitic, spotty fluorescence and cut fluorescence as above.</u>			
	5502	5503	1'	<u>Limestone</u> , III F- MA + B ₁ as above, <u>fluorescence and cut fluorescence as above.</u>			
	5503	5504	1'	<u>Limestone</u> , III F-MA + B ₁ as above, stylolitic.			
	5504	5505	1'	<u>Limestone</u> , medium gray brown, III-IVF-FA stylolitic.			
	5505	5506	1'	<u>Limestone</u> , light medium gray brown, III F- MA psuedoolitic, some calcite has completely filled numerous pores.			
	5506	5507	1'	<u>Limestone</u> , as above.			
	5507	5508	1'	<u>Limestone</u> , medium gray brown, I-III VFA, slightly argillaceous with very argillaceous and micaceous stringers and seams, stylolitic.			
	5508	5509	1'	<u>Limestone</u> , as above, but no stylolytes.			
	5509	5510	1'	<u>Limestone</u> , as above, rare micro-foraminifera, becoming light brown in part.			

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).
NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

SHELL OIL COMPANY

WEEK ENDING _____

CORE FROM _____ TO _____

CORES EXAMINED BY Bacheller

CORE RECORD

AREA OR FIELD N. Desert CreekCOMPANY Shell OilLEASE AND WELL NO. 1

NO.	FROM	TO	RECOV- ERED	FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE	SYMBOL	OBSERVED DIP	CORE INDICATIONS OIL- GAS
							CORE OR DITCH
3	Cont'd 5510	5511	1'	<u>Limestone</u> , top part of foot has limestone as shown above with micro foram and colonial corals. Bottom of foot is light brown I-III VFA with no argillaceous stringers or streaks.			See Description
	5511	5512	1'	<u>Limestone</u> , as above in bottom of foot, very slightly argillaceous with forams.			
	5512	5513	1'	<u>Limestone</u> , as above, medium brown in part, slight argillaceous streaks, Fusulinids and rare micro-forams.			
	5513	5514	1'	<u>Limestone</u> , medium brown gray, III FA - fossiliferous with rare fusulinids and other minute fragments. Styolitic in part.			
	5514	5515	1'	<u>Limestone</u> , light bluish gray, III FA, rare fossile fragments, slightly argillaceous.			
	5515	5516	1'	<u>Limestone</u> , as above, becoming slightly darker in color and medium argilla- ceous. No fossils.			
	5516	5517	1'	<u>Limestone</u> , as above, medium argillaceous - few poorly preserved Fusulinids, slightly salty taste.			

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). 5-SAND (90-100%).

NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

SHELL OIL COMPANY

WEEK ENDING _____

CORE FROM 5517 TO 5567CORES EXAMINED BY Bacheller

CORE RECORD

AREA OR FIELD N. Desert CreekCOMPANY Shell OilLEASE AND WELL NO. 1

NO.	FROM	TO	RECOVERED	FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE	SYMBOL	OBSERVED DIP	CORE INDICATIONS OIL-GAS CORE OR DITCH
4	5517	5567	50'				
	5517	5518	1'	<u>Limestone</u> , medium brown, light brown. III FA - slightly argillaceous, fusulinids in poor preservation.			See Description
	5518	5519	1'	<u>Limestone</u> , as above.			
	5519	5520	1'	<u>Limestone</u> , as above, but in part medium-dark brown and medium argillaceous streaks, stylolitic.			
	5520	5521	1'	<u>Limestone</u> , as above, predominantly medium brown, medium argillaceous streaks. Stylolitic.			
	5521	5522	1'	<u>Limestone</u> , as above, numerous fusulinids.			
	5522	5523	1'	<u>Limestone</u> , light medium brown to gray brown, III FA + B ₂ , slightly medium argillaceous, fair fusulinids, <u>spotty fluorescence</u> , <u>gold-white</u> , <u>blue-white cut fluorescence</u> .			
	5523	5524	1'	<u>Limestone</u> , III FA + B ₂ + C ₅ , <u>80% fluorescence</u> , and cut fluorescence, strong petroleum odor.			
	5524	5525	1'	<u>Limestone</u> , III FA + B ₂ + C ₅ , <u>80% fluorescence and cut fluorescence</u> . Dead oil staining in some vugs.			
	5525	5526	1'	<u>Limestone</u> , III FA + B ₂ + C ₁₀ , <u>75% fluorescence and cut fluorescence</u> .			
	5526	5527	1'	<u>Limestone</u> , III FA + B ₂ + C ₁₀ , <u>75% fluorescence and cut fluorescence</u> .			
	5527	5528	1'	<u>Limestone</u> , light medium brown grading to light medium brown gray, III VF - FA. Very stylolitic with <u>10% faint fluorescence along stylolitic joints</u> . Some secondary calcite deposited in a few vugs.			
	5528	5529	1'	<u>Limestone</u> , III VF - FA.			
	5529	5530	1'	<u>Limestone</u> , medium gray to gray-brown I-III VFA. Stylolites appear to have horizontal fracture planes closely spaced.			

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).

NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

SHELL OIL COMPANY

WEEK ENDING _____

CORE FROM _____ TO _____

CORES EXAMINED BY Bacheller

CORE RECORD

AREA OR FIELD N. Desert CreekCOMPANY Shell OilLEASE AND WELL NO. 1

NO.	FROM	TO	RECOVERED	FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE	SYMBOL	OBSERVED DIP	CORE INDICATIONS OIL- GAS
							CORE OR DITCH
4	Cont'd						
	5530	5531	1'	<u>Limestone</u> as above, with few forams.			See Description
	5531	5532	1'	<u>Limestone</u> as above, but with occasional irregular shaly streaks.			
	5532	5533	1'	<u>Limestone</u> as above.			
	5533	5536	3'	<u>Limestone</u> , light medium gray-brown I-VFA. Brachiopods. Numerous tight closely spaced horizontal fractures as above, some vugs filled with secondary calcite.			
	5536	5537	1'	<u>Limestone</u> , I-III VFA, very little secondary calcite.			
	5537	5538	1'	<u>Limestone</u> , I-III VFA, medium argillaceous and dolomitic in part. Top half separated from bottom half with 1/2" black shale stringer and stylolite.			
	5538	5539	1'	<u>Limestone</u> , medium light gray-brown and brown-gray, I-III VFA medium argillaceous and medium dolomitic.			
	5539	5540	1'	<u>Limestone</u> , medium gray, brown-gray, III VF-F + C ₂ . Slightly argillaceous, <u>dead oil in a few of the pores.</u>			
	5540	5541	1'	<u>Limestone</u> , medium light gray, III F-LA. Bioclastic with fragments and grains of unidentifiable fossils.			
	5541	5543	2'	<u>Limestone</u> , III VF-LA + C ₂ , <u>spotty yellow fluorescence, and blue-white cut fluorescence.</u>			
	5543	5544	1'	<u>Limestone</u> , I VFC ₅ +D ₅ , <u>60% uniform fluorescence and cut fluorescence.</u>			
	5544	5545	1'	<u>Limestone</u> , I VFC +D ₅ , with vugs up to 1/2" diameter <u>some dead oil staining, 80% fluorescence and cut fluorescence on some vugs interconnected.</u>			
	5545	5546	1'	<u>Limestone</u> , light medium gray I VFC ₂ +D ₁₀ <u>dead oil covering numerous vug surfaces. Good petroleum odor and 75% fluorescence and cut fluorescence, fragments and whole shells of brachiopods.</u>			

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).

NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

SHELL OIL COMPANY

WEEK ENDING _____

CORE FROM _____ TO _____

CORES EXAMINED BY Bacheller

CORE RECORD

AREA OR FIELD N. Desert CreekCOMPANY Shell OilLEASE AND WELL NO. 1

NO.	FROM	TO	RECOVERED	FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE	SYMBOL	OBSERVED DIP	CORE INDICATIONS OIL-GAS
							CORE OR DITCH
11	Cont'd 5546	5567	21'	<u>Limestone</u> , (IVF C + D) as above. Visible porosity varies from 10% to 40% in places with an estimated over all porosity of 20%. <u>Good petroliferous odor and 80% fluorescence and cut fluorescence.</u> Occasionally mud was found in vugs and channels in the center of the core when it was broken open.			See Description

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).

NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

SHELL OIL COMPANY

WEEK ENDING _____

CORE FROM 5567 TO 5600.5CORES EXAMINED BY Bacheller

CORE RECORD

AREA OR FIELD N. Desert CreekCOMPANY Shell OilLEASE AND WELL NO. N. Desert Creek

NO.	FROM	TO	RECOVERED	FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE	SYMBOL	OBSERVED DIP	CORE INDICATIONS OIL-GAS
							CORE OR DITC
5 5	5567 5567	5602 5568	33.5' 1'	<u>Limestone</u> , medium light gray-brown - medium gray, I VFA + D ₅ and III F D ₅ -C ₅ , <u>fossiliferous, 60% gold-yellow fluorescence, white - blue - white cut fluorescence.</u> Some surfaces have dead oil staining in vugs.			
	5568	5569	1'	<u>Limestone</u> , as above, I-III VFA + C ₅ + D ₁₀ , <u>70% fluorescence and cut fluorescence.</u>			
	5569	5570	1'	<u>Limestone</u> , as above, I-III VFA + C ₅ + D ₁₀ , <u>70% fluorescence and cut fluorescence.</u>			
	5570	5571	1'	<u>Limestone</u> , medium gray, IVFA+D ₅ -Vugs filled with calcite. <u>20% fluorescence and cut fluorescence.</u>			
	5571	5572	1'	<u>Limestone</u> , as above, I VFA + D ₂ , <u>shows as above.</u>			
	5572	5573	1'	<u>Limestone</u> , as above, medium gray - brown-gray, III II VFA, very argillaceous			
	5573	5574	1'	<u>Limestone</u> , medium brown III VF-FA, medium argillaceous. <u>40% fluorescence and cut fluorescence.</u>			
	5574	5575	1'	<u>Limestone</u> , as above, III VF-FA, <u>95% fluorescence and cut fluorescence.</u>			
	5575	5576	1'	<u>Limestone</u> , as above, III VF-FA + B ₁₋₃ , <u>60% fluorescence and cut fluorescence.</u>			
	5576	5578	2'	<u>Limestone</u> , as above, III VFA + B ₁₋₃ , fossiliferous, <u>25% fluorescence and cut fluorescence.</u>			
	5578	5579	1'	<u>Limestone</u> , as above, III VFA + B ₁₅ , <u>60% fluorescence and cut fluorescence.</u>			
	5579	5581	2'	<u>Limestone</u> , light gray - medium brown, III VF+C ₁₀ (VFA in small spots), <u>shows as above.</u>			
	5581	5582	1'	<u>Limestone</u> , light - medium gray, III F-MA, argillaceous in thin irregular streaks. <u>No shows.</u>			

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).

NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

SHELL OIL COMPANY

WEEK ENDING _____

CORE FROM _____ TO _____

CORES EXAMINED BY Bacheller

CORE RECORD

AREA OR FIELD N. Desert CreekCOMPANY Shell OilLEASE AND WELL NO. 1

NO.	FROM	TO	RECOVERED	FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE	SYMBOL	OBSERVED DIP	CORE INDICATIONS OIL- GAS
							CORE OR DITCH
5	Cont'd						
	5582	5583	1'	<u>Limestone</u> , as above, but fossiliferous. <u>0-40% spotty fluorescence and cut fluorescence as above.</u>			See Descripti
	5583	5584	1'	<u>Limestone</u> , light gray, III VFA, medium argillaceous. Stylolitic.			
	5584	5585	1'	<u>Limestone</u> , as above. Fossil fragments.			
	5585	5586	1'	<u>Dolomite</u> , light - medium gray, III FA+B ₃ - medium argillaceous and slightly calcareous. <u>70% fluorescence and cut fluorescence as above.</u>			
	5586	5587	1'	<u>Dolomite</u> , light - medium gray-brown, III FA, medium argillaceous and slightly calcareous. <u>20% fluorescence and cut fluorescence.</u>			
	5587	5588	1'	<u>Dolomite</u> , medium brown, III F B ₅ , rare anhydrite inclusions, slightly calcareous. <u>80% fluorescence and cut fluorescence.</u>			
	5588	5590	2'	<u>Dolomite</u> , III FA + B ₇₋₁₀ ^{+C} ₇₋₁₀ , <u>90% fluorescence and cut fluorescence.</u>			
	5590	5591	1'	<u>Dolomite</u> , III FA + B ₇₋₁₀ and C ₇₋₁₀ , <u>20% fluorescence and cut fluorescence.</u>			
	5591	5593	2'	<u>Dolomite</u> , medium brown, III FA+B ₃ , medium argillaceous with thin shale streaks. <u>Shows as above.</u>			
	5593	5594	1'	<u>Dolomite</u> , III FA+B ₁₀ , <u>60% fluorescence and cut fluorescence.</u>			
	5594	5595	1'	<u>Dolomite</u> , as above, becoming very argillaceous and no shale streaks and soft. <u>No shows.</u>			
	5595	5597	2'	<u>Dolomite</u> , medium brown III VFA, very argillaceous, slightly calcareous.			
	5597	5598	1'	<u>Dolomite</u> , as above, but with rare <u>limestone</u> nodules, brown, III FA, to 1" in diameter and 2" long, scattered.			
	5598	5599	1'	<u>Dolomite</u> , as above, medium calcareous and becoming hard, fossiliferous.			

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). 5-SAND (90-100%).

NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

SHELL OIL COMPANY

WEEK ENDING _____

CORE FROM _____ TO _____

CORES EXAMINED BY Bacheller

CORE RECORD

AREA OR FIELD N. Desert CreekCOMPANY Shell OilLEASE AND WELL NO. 1

NO.	FROM	TO	RECOVERED	FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE	SYMBOL	OBSERVED DIP	CORE INDICATIONS OIL- GAS
							CORE OR DITCH
5	Cont'd						
	5599	5600	1'	50% <u>Shale</u> , black, slightly calcareous and slightly micaceous. 50% <u>Dolomite</u> , as above.			See Description
	5600	5600½	.5'	<u>Shale</u> , as above.			

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).

NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.



PHILLIPS PETROLEUM COMPANY
BARTLESVILLE, OKLAHOMA

November 30, 1964

Ratherford Unit, San Juan County,
Utah - Pressure Maintenance -
Expansion of Injection Program

Utah Oil & Gas Conservation Commission
310 Newhouse Building
Salt Lake City, Utah

Attention Mr. Cleon B. Feight

Gentlemen:

The Oil and Gas Conservation Commission of the State of Utah by its order entered in Cause 63 dated September 13, 1961, approved Phillips Petroleum Company's application for approval of a pressure maintenance program for the Ratherford Unit. Subsequent approvals have been given for modifications in the injection program as originally submitted, the last such approval was granted on April 13, 1964, relative to Phillips' submittal of April 2, 1964.


Pursuant to Item 3 of the Commission's letter of September 13, 1961, Phillips Petroleum Company respectfully requests that the Commission, or its designated representative, approve the following changes in the pressure maintenance program:

1. Convert to injection service wells Nos. 7-21, 7-43, 12-44, 18-21, 20-21, 29-41, 21-23, 16-41, and 15-41. (See attached plat.)
2. Attempt to inject 52,000 to 56,000 barrels of water per day to replace about 120% of reservoir voidage on a current basis.

All work for which you have given prior approval has been completed. Nevertheless, existing injection wells will not accept a sufficient volume of water to permit realization of the goal outlined above in Item 2. For this reason, conversion of additional wells to injection service is proposed. No need for other modification of the pressure maintenance program is indicated at this time.

A majority of the Working Interest Owners in the Ratherford Unit have approved this proposal. Your approval is solicited.

Respectfully submitted,


Earl Griffin, Manager
Production Division

JEC:cm
Attach.

December 8, 1964

Phillips Petroleum Company
Bartlesville,
Oklahoma

Attention: Mr. Earl Griffin, Manager Prod. Division

Dear Sir:

The following changes in your pressure maintenance program for the Rutherford Field are hereby approved as per your request.

1. Convert to injection service wells nos. 7-21, 7-43, 12-44, 18-21, 20-21, 29-41, 21-23, 16-41, and 15-41.
2. Attempt to inject 52,000 to 56,000 barrels of water per day to replace about 120% of reservoir voidage on a current basis.

Very truly yours,

OIL & GAS CONSERVATION COMMISSION

CLEON B. FIKENT
EXECUTIVE DIRECTOR

cbf,kgw

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN TR. ATE*
(Other instructions on re-
verse side)Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		7. UNIT AGREEMENT NAME SS-I-4192
2. NAME OF OPERATOR Phillips Petroleum Company		8. FARM OR LEASE NAME Rathford Unit
3. ADDRESS OF OPERATOR P. O. Drawer 1150, Cortez, Colorado 81321		9. WELL NO. 12-44
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 660' from South Line, 660' from East Line SE SE 12		10. FIELD AND POOL, OR WILDCAT Greater Anoth
14. PERMIT NO.		11. SEC., T., R., M., OR BLE. AND SURVEY OR AREA 12-415-23E S1E4
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4710 KB		12. COUNTY Orange San Juan
		13. STATE Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐FRACTURE TREAT ☐SHOOT OR ACIDIZE ☐REPAIR WELL ☐

(Other)

PULL OR ALTER CASING ☐MULTIPLE COMPLETE ☐ABANDON* ☐CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐FRACTURE TREATMENT ☐SHOOTING OR ACIDIZING ☐

(Other)

REPAIRING WELL ☐ALTERING CASING ☐ABANDONMENT* ☐

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Full pumping equipment. Perforate Desert Creek from 5449-53; 5468-78'; 5495-5560'; 5529-32'; 5543-51'; 5558-70' with 2 jet shots per foot. Rerun tubing with Marlex liner, acidize above perforations and perforations from 5578-86', 5590-98' with approximately 3600 gallons acid and convert to water injection.

Present Production: 11-28-64: 37 BOPD, 128 MCFGPD, 0 BHPD.

18. I hereby certify that the foregoing is true and correct

SIGNED

C. M. Boles

TITLE

Area Superintendent

DATE

1-14-65

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

C. M. Boles

DATE

1-14-65

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN TR
(Other instruct.
verse side)7*
e-Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

14-20-603-246

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

S-I-4192

8. FARM OR LEASE NAME

Rutherford Unit

9. WELL NO.

1244

10. FIELD AND POOL, OR WILDCAT

Greater Aneth

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

12-419-23E S1E4

12. COUNTY DEKACH 13. STATE

San Juan

Utah

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)1. OIL WELL ☐ GAS WELL ☐ OTHER ☒ Water Injection Well

2. NAME OF OPERATOR

Phillips Petroleum Company

3. ADDRESS OF OPERATOR

P. O. Drawer 1150, Cortez, Colorado 81321

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface

660' FSL, 660' TEL, SE SE 12

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

4710 KB

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐FRACTURE TREAT ☐SHOOT OR ACIDIZE ☐REPAIR WELL ☐(Other) ☐PULL OR ALTER CASING ☐MULTIPLE COMPLETE ☐ABANDON* ☐CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐FRACTURE TREATMENT ☐SHOOTING OR ACIDIZING ☐(Other) ☒ Convert to Water Injection(NOTE: Report results of multiple completion or Well
Completion or Recompletion Report and Log form.)REPAIRING WELL ☐ALTERING CASING ☐ABANDONMENT* ☐

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

5-7-65 through 5-11-65:

Moved in well service unit, laid down rods and pump and tubing, perforated 5½" casing 5449-53, 5468-78, 5495-5500, 5529-32, 5543-51 and 5558-70 with 2 jet shots per foot, tagged fillup at 5587', bailed hole to 5603', ran 2" tubing with Baker Tension Packer, hooked well up for water injection. Started injecting water 5-8-65. Changed well classification from oil well to water injection well and number from 12-44 to 12444 effective 5-8-65.

Previous Production from Desert Creek Zone, Paradox Formation, Greater Aneth Field:

39 BOPD, 141 MCFGPD, 0 BWPD.

Present Injection Rate - Desert Creek Zone, Paradox Formation, Greater Aneth Field:

2500 BWPD on vacuum.

18. I hereby certify that the foregoing is true and correct

SIGNED

G. M. Boles

TITLE District Superintendent

DATE

6-23-65

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN ~~DUPLICATE~~
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

11-20-603-246

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo Tribe

7. UNIT AGREEMENT NAME

3W-I-4192

8. FARM OR LEASE NAME

Rutherford Unit

9. WELL NO.

1244

10. FIELD AND POOL, OR WILDCAT

Greater Aneth Field

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

12-413-23E, S.L.E.M.

12. COUNTY OR PARISH

San Juan

13. STATE

Utah

1.

OIL WELL ☐ GAS WELL ☐ OTHER

Water Injection Well

2. NAME OF OPERATOR

Phillips Petroleum Co.

3. ADDRESS OF OPERATOR

Drawer 1150, Cortez, Colorado

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)

At surface

660' TSL, 660' FEL, SE SE 12

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

4710' KB

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

☐
☐
☒
☐

PULL OR ALTER CASING

☐
☐
☐
☐

FRACTURE TREAT

MULTIPLE COMPLETE

SHOOT OR ACIDIZE

ABANDON*

REPAIR WELL

CHANGE PLANS

(Other)

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

☐
☐
☐
☐

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

In attempt to increase water injection rate, treat well with 2000 gallons of 15% regular acid with 2 gallons A-110 additive per 1000 gallons of acid, 100% of J-415, 2000 gallons of 15% regular acid with 2 gallons A-110 additive per 1000 gallons of acid.

Present Injection Rate: 2553 BWPD at 370%.

18. I hereby certify that the foregoing is true and correct

SIGNED

C. H. Bolen

TITLE

District Superintendent

DATE

10-13-65

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

December 15, 1965

Phillips Petroleum Company
Drawer 1150
Cortez, Colorado

Gentlemen:

Upon checking our files we note that we have not received subsequent reports for the following wells:

RATHERFORD UNIT #9W21,
Sec. 9, T. 41 S., R. 24 E.

Shoot or Acidize

RATHERFORD UNIT #12-31,
Sec. 12, T. 41 S., R. 23 E.

Perforate Ismry & Acidize

RATHERFORD UNIT #18W43,
Sec. 18, T. 41 S., R. 24 E.

Shoot or acidize

RATHERFORD UNIT #18W21,
Sec. 18, T. 41 S., R. 24 E.

Shoot or acidize

RATHERFORD UNIT #12W44,
Sec. 12, T. 41 S., R. 23 E.

Shoot or acidize

RATHERFORD UNIT #21W41,
Sec. 21, T. 41 S., R. 24 E.

Shoot or acidize

RATHERFORD UNIT #21W21,
Sec. 21, T. 41 S., R. 24 E.

Shoot or acidize

Phillips Petroleum Company
Drawer 1150
Cortez, Colorado

(2)

RATHERFORD UNIT #15423,
Sec. 15, T. 41 S., R. 24 E.

Shoot or acidize

RATHERFORD UNIT #16443,
Sec. 16, T. 41 S., R. 24 E.

Shoot or acidize

Your attention to this matter will be greatly appreciated.

Very truly yours,

OIL & GAS CONSERVATION COMMISSION

ANNETTE E. HAMMERS
RECORDS CLERK

erh

Enclosures: OGCC-1b

TED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN
(Other instructions
reverse side)CATE*
on re-Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> Water Injection Well	7. UNIT AGREEMENT NAME 21-20-603-216
2. NAME OF OPERATOR Phillips Petroleum Company	8. FARM OR LEASE NAME Wardwell Unit
3. ADDRESS OF OPERATOR Drawer 1150, Cortez, Colorado 81321	9. WELL NO. 2164
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 660° TSL, 660° TSL, SE 2E 12	10. FIELD AND POOL, OR WILDCAT Greater Smith Field
	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 21-20-603, S.L.S.N.
14. PERMIT NO.	15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4710' KB
	12. COUNTY San Juan 13. STATE New Mex

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐FRACTURE TREAT ☐SHOOT OR ACIDIZE ☐REPAIR WELL ☐(Other) ☐PULL OR ALTER CASING ☐MULTIPLE COMPLETE ☐ABANDON* ☐CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐FRACTURE TREATMENT ☒SHOOTING OR ACIDIZING ☐(Other) ☐REPAIRING WELL ☐ALTERING CASING ☐ABANDONMENT* ☐

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Acid Job (3-12-64)

Acidized Desert Creek zone through 2" bare steel tubing and perforations with 2000 gallons 15% regular acid, 250 gallons Sol Block, followed with 2000 gallons 15% regular acid. Overall treating rate 6.6 BVM. Instantaneous DIP 1500%. Hooked back up for water injection, resumed injection.

PREVIOUS INJECTION RATE: 1439 BVPD at 1900', choke open.**PRESENT INJECTION RATE: 3500 BVPD at 2800' through 28/64" choke.**

18. I hereby certify that the foregoing is true and correct

SIGNED **C. H. Dine**

TITLE

District Superintendent

DATE

2-1-65

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

PHILLIPS PETROLEUM COMPANY
P. O. Drawer 1150
Cortez, Colorado

February 28, 1966

In re: Ratherford Unit Monthly Operating Report
January 1966

Page No. 2

III. SUCKER ROD FAILURES

There were 30 rod jobs required during January.

<u>TYPE JOB</u>	<u>Number</u>
Rod Breaks (Includes pin and coupling failures)	30
Rod Replacements (Includes partial string and coupling replacements performed at time of above breaks)	3

IV. WORKOVERS

Ratherford Unit 9-14 (Clean out)

On January 12, 1966 pulled rods and tubing. Found top of casing at 5563'. Cleaned out 7' of frac sand and cement with hydrostatic bailer to 5570' TD. Ran tubing and rods, returned well to producing status 1-13-66. Production increased from 4 BC and 61 BW per day before the cleanout to 10 BC and 138 BW per day following the cleanout.

Ratherford Unit 12244 (Acid Job)

On January 19, 1966 acidized well through 2" bare steel tubing and packer with 2000 gallons 15% regular acid, 250 gallons temporary block, and 2000 gallons 15% regular acid. Injectivity increased from 1639 BHPD at 490# before the treatment to 3500 BHPD at 280# (curtailed injection rate) after the treatment.

Ratherford Unit 15223 (Acid Job)

On January 6, 1966 acidized well through 2" tubing and Marlex liner and packer with 15,000 gallons 28% acid, 16,000 gallons fresh water, and 500 gallons salt plug in two stages as follows: First stage 7500 gallons 28% acid followed by 7500 gallons fresh water and 500 gallons salt plug. Second stage 7500 gallons 28% acid followed by 8500 gallons fresh water. Injectivity increased from 160 BHPD at 2620# before the treatment to 240 BHPD at 260# following the treatment.

(Cont'd page 3)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN THE
(Other instruction
verse side)DATE
a re-Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

11-20-603-246

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

M-1-4192

8. FARM OR LEASE NAME

Rutherford Unit

9. WELL NO.

12W44

10. FIELD AND POOL, OR WILDCAT

Gresty-Tineth

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

12-415-21E S.L.B.M.

12. COUNTY OF

San Juan

13. STATE

Utah

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)1. OIL WELL ☐ GAS WELL ☐ OTHER ☒ Water Injection Well

2. NAME OF OPERATOR

Phillips Petroleum Co.

3. ADDRESS OF OPERATOR

Drawer 1150, Cortez, Colorado 81321

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface660' from South Line; 660' from East Line
NE SE 12

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

4710 KB

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

☐

PULL OR ALTER CASING

☐

FRACTURE TREAT

☒

MULTIPLE COMPLETE

☐

SHOOT OR ACIDIZE

☐

ABANDON*

☐

REPAIR WELL

☐

CHANGE PLANS

☐

(Other)

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

☐

REPAIRING WELL

☐

FRACTURE TREATMENT

☐

ALTERING CASING

☐

SHOOTING OR ACIDIZING

☐

ABANDONMENT*

☐

(Other)

(NOTE: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any
proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones perti-
nent to this work.)*

Acidize well with 6,000 gallons 15% acid and return to injection.

PRESENT INJECTION RATE: 970 BWPD at 56%.

18. I hereby certify that the foregoing is true and correct

SIGNED

C. M. Boies

TITLE

Dist. Supt.

DATE

12-22-66

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN THE DATE*
(Other instructions on re-
verse side)Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER Water Injection well		5. LEASE DESIGNATION AND SERIAL NO. 14-20-003-246
2. NAME OF OPERATOR Phillips Petroleum Co.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo
3. ADDRESS OF OPERATOR Drawer 1150, Cortes, Colo. 81321		7. UNIT AGREEMENT NAME 20-1-1192
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 660' From South Line; 660' From East Line, SE SE 12		8. FARM OR LEASE NAME Rutherford Unit
14. PERMIT NO.		9. WELL NO. 1284
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4710 KB		10. FIELD AND POOL OR WILDCAT Greater Aneth
		11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA 12-41S-23E 34BN
		12. COUNTY OF San Juan 13. STATE Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐FRACTURE TREAT ☐SHOOT OR ACIDIZE ☐REPAIR WELL ☐(Other) ☐PULL OR ALTER CASING ☐MULTIPLE COMPLETE ☐ABANDON* ☐CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐FRACTURE TREATMENT ☒SHOOTING OR ACIDIZING ☐(Other) ☐REPAIRING WELL ☐ALTERING CASING ☐ABANDONMENT* ☐

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

On January 12, 1967 acidized Desert Creek perforations 5449-5596' OA with 6000 gallons regular 15% acid in four equal stages separated by three equal 1000 gallon batches of salt water with 3000# salt as blocking agent.

PREVIOUS INJECTION RATE: 900 BWPD at 485#.

PRESENT INJECTION RATE 3500 BWPD on vacuum. ✓

18. I hereby certify that the foregoing is true and correct

SIGNED

C. M. Boles

TITLE

Dist. Supt

DATE

2-1-67

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN 1.
(Other instructions
reverse side)E-
re-Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

14-20-603-246

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

SM-I-4192

8. FARM OR LEASE NAME

Katharford Unit

9. WELL NO.

1244

10. FIELD AND POOL, OR WILDCAT

Greater Aneth

11. SEC., T., R., M., OR B.L. AND
SURVEY OR AREA

12-41S-23E 41N

12. COUNTY OF

San Juan

13. STATE

Utah

SUNDRY NOTICES AND REPORTS ON WELLS
(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)1. OIL ☐ GAS ☐ OTHER ☐
WELL WELL WELL

Water Injection well

2. NAME OF OPERATOR

Phillips Petroleum Co.

3. ADDRESS OF OPERATOR

Drawer 1150, Cortes, Colo. 81321

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface

660' From South Line; 660' From East Line, SE SE 12

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

4710 KB

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐PULL OR ALTER CASING ☐FRACTURE TREAT ☐MULTIPLE COMPLETE ☐SHOOT OR ACIDIZE ☐ABANDON* ☐REPAIR WELL ☐CHANGE PLANS ☐(Other) ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐REPAIRING WELL ☐FRACTURE TREATMENT ☒ALTERING CASING ☐SHOOTING OR ACIDIZING ☐ABANDONMENT* ☐(Other) ☐(NOTE: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any
proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones perti-
nent to this work.)*

On January 12, 1967 acidized Desert Creek perforations 5449-5598' OA with 6000 gallons
regular 15% acid in four equal stages separated by three equal 1000 gallon batches of
salt water with 3000# salt as blocking agent.

PREVIOUS INJECTION RATE: 908 BWPD at 485#.

PRESENT INJECTION RATE: 3500 BWPD on vacuum.

18. I hereby certify that the foregoing is true and correct

SIGNED

C. M. Boles

TITLE

Dist. Supt.

DATE

1-25-67

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

14-30-603-246

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

SW-I-4192

8. FARM OR LEASE NAME

Rutherford Unit

9. WELL NO.

1244

10. FIELD AND POOL, OR WILDCAT

Greater Aneth

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

12-41E-23E SW1/4

12. COUNTY ~~Box~~
San Juan

13. STATE
Utah

1. OIL WELL ☐ GAS WELL ☐ OTHER ☒ Water Injection

2. NAME OF OPERATOR

Phillips Petroleum Company

3. ADDRESS OF OPERATOR

Drawer 1150, Cortez, Colorado 81321

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface

660' FSL, 660' FEL, SE SE Sec. 12

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

4710' KB

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

☐
☐
☒
☐

PULL OR ALTER CASING

☐
☐
☐
☐

FRACTURE TREAT

MULTIPLE COMPLETE

SHOOT OR ACIDIZE

ABANDON*

REPAIR WELL

CHANGE PLANS

(Other)

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

☐
☐
☐

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Acidize with 4000 gallons 15% in 2 stages.

Present Injection: Average 1414 BWPD at 1388' during Feb. 1969.

18. I hereby certify that the foregoing is true and correct

SIGNED

C. H. Bolen
C. H. Bolen

TITLE

District Superintendent

DATE

3-27-69

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

Orig. & 2 cc: USGS, Farmington, N. M.
2 cc: Utah O&CC, Salt Lake
1 cc: B ville
1 cc: Denver
1 cc: File

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-B1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> Water Injection		5. LEASE DESIGNATION AND SERIAL NO. 11-20-603-246
2. NAME OF OPERATOR Phillips Petroleum Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo
3. ADDRESS OF OPERATOR Drawer 1150, Cortez, Colorado 81321		7. UNIT AGREEMENT NAME U-I-4192
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 660' FSL, 660' FSL, SE SE Sec. 12		8. FARM OR LEASE NAME Rathenford Unit
14. PERMIT NO.		9. WELL NO. 12444
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4710' KB		10. FIELD AND POOL, OR WILDCAT Greater Aneth
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 12-418-23E S18N
		12. COUNTY OR PARISH Salt Lake
		13. STATE Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
(Other) <input type="checkbox"/>	

SUBSEQUENT REPORT OF:

WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOTING OR ACIDIZING <input checked="" type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
(Other) <input type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

On April 17, 1969 acidized Desert Creek Zone I and II perforations 5449-53, 5468-78, 5495-5500, 5529-32, 5543-51, 5558-70, 5578-86, and 5590-5598' with 4000 gallons 15% acid in two equal 2000 gallon stages, separated by 1000 gallons salt plug. Resumed injection.

PREVIOUS INJECTION RATE: 1529 BWPD at 1533#.

PRESENT INJECTION RATE: 3500 BWPD on vacuum.

18. I hereby certify that the foregoing is true and correct.

SIGNED C. A. B. Bliss TITLE District Superintendent DATE 5-19-69

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

Orig. & 2 cc: USGS, Farmington, N.M.
2 cc: Utah O&G, Salt Lake City
~~James D. Dwyer~~
1 cc: Denver
1 cc: Superior Oil, Cortez, Colo
1 cc: File

*See Instructions on Reverse Side

STATE OF UTAH
DIVISION OF OIL, GAS, AND MINING
ROOM 4241 STATE OFFICE BUILDING
SALT LAKE CITY, UTAH 84114
(801) 533-5771
(RULE I-5 & RULE I-4)

FORM NO. DOGM-UIC-1
(Revised 1982)

IN THE MATTER OF THE APPLICATION OF
PHILLIPS PETROLEUM COMPANY

CAUSE NO. C-3(B)

ADDRESS P.O. BOX 2920
CASPER, WYOMING ZIP 82602
INDIVIDUAL PARTNERSHIP ☒ CORPORATION
FOR ADMINISTRATIVE APPROVAL TO DISPOSE OR
INJECT FLUID INTO THE 12W44 WELL
SEC. 12 TWP. 41S RANGE 23E
SAN JUAN COUNTY, UTAH

ENHANCED RECOVERY INJ. WELL ☒
DISPOSAL WELL ☐
LP GAS STORAGE ☐
EXISTING WELL (RULE I-4) ☒

APPLICATION

Comes now the applicant and shows the Corporation Commission the following:

1. That Rule I-5 (g) (iv) authorizes administrative approval of enhanced recovery injections, disposal or LP Gas storage operations.
2. That the applicant submits the following information.

Lease Name Ratherford Unit	Well No. 12W44	Field Greater Aneth	County San Juan
Location of Enhanced Recovery Injection or Disposal Well 12W44 Sec. 12 Twp. 41S Rge. 23E			
New Well To Be Drilled Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Old Well To Be Converted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Casing Test Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Date 5-83	
Depth-Base Lowest Known Wingate Fresh Water Within 1/2 Mile 1550'	Does Injection Zone Contain Oil-Gas-Fresh Water Within 1/2 Mile YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		State What Oil & Gas
Location of Injection Source(s) Desert Creek Paradox I & II San Juan River	Geologic Name(s) Desert Creek (5567') and Depth of Source(s) San Juan River (Surface)		
Geologic Name of Injection Zone Desert Creek I & II	Depth of Injection Interval 5449 to 5598		
a. Top of the Perforated Interval: 5449	b. Base of Fresh Water: 1550'	c. Intervening Thickness (a minus b) 3899	
Is the intervening thickness sufficient to show fresh water will be protected without additional data? YES NO See Attachment #4			
Lithology of Intervening Zones See Attachment #1			
Injection Rates and Pressures Maximum B/D SD 3-22-80 PSI			
The Names and Addresses of Those to Whom Notice of Application Should be Sent.			
Navajo Tribe, Minerals Dept., P.O. Box 146, Window Rock, AZ 86515			
Superior Oil, P.O. Box 4530, The Woodlands, TX 77380			
Texaco Inc., P.O. Box 2100, Denver, CO 80201			
Southland Royalty, 1000 Fort Worth Club Tower, Fort Worth, TX 76102			

State of Wyoming)

PHILLIPS PETROLEUM COMPANY

County of Natrona)

Applicant

Before me, the undersigned authority, on this day personally appeared A. E. Stuart
known to me to be the person whose name is subscribed to the above instrument, who being by me duly sworn on
oath states, that he is duly authorized to make the above report and that he has knowledge of the facts stated
therein, and that said report is true and correct.

Suscribed and sworn to before me this 21st day of Sept, 19 83

SEAL

My commission expires

DONALD L. HUDSON - Notary Public
County of Natrona State of Wyoming
My Commission Expires Nov 1986

(OVER)

Notary Public in and for Natrona Co., Wyoming

1. Attach qualitative and quantitative analysis of representative sample of water to be injected and a qualitative and quantitative analysis of the injection formation of water.
2. Attach plat showing subject well and all known oil and gas wells, abandoned, drilling and dry holes within one-half mile, together and with the name of the operator(s).
3. Attach Drillers Log (Form DOGM-UIC-2). (Appropriate Surety must be on file with Conservation Division or appropriate government agencies.)
4. Attach Electric or Radioactivity Log of Subject well (if released).
5. Attach schematic drawing of subsurface facilities including; Size, setting depth, amount of cement used measured or calculated tops of cement surface, intermediate (if any) and production casings; size and setting depth of tubing; type and setting depth of packer; geologic name of injection zone showing top and bottom of injection interval.
6. If the application is for a NEW well the original and six (6) copies of the application and three (3) complete sets of attachments shall be mailed to the Division. For EXISTING well applications (Rule I-4) only ONE copy of the application and ONE complete set of attachments are required to be mailed to the Division.
7. The Division is required to send notice of application to the surface owner of the land within one-half mile of the injection well and to each operator of a producing leasehold within one-half mile of the injection well. List all required names and addresses in the appropriate space provided on the front of this form.
8. Notice that an application has been filed shall be published by the Division in a newspaper of general circulation in the county of publication before the application is approved. The notice shall include the name and address of applicant, location of proposed injection or disposal well, injection zone, injection pressure and volume. If no written objection is received within 15 days from date of publication the application may be approved administratively.
9. A well shall not be used for injection or disposal unless completed machine accounting Form DOGM-UIC-3b is filed by January 31st each year.
10. Approval of this application, if granted, is valid only as long as there is no substantial change in the operations set forth in the application. A substantial operation change requires the approval of a new application.
11. If there is less intervening thickness required by Rule I-5 (b) 4, attach sworn evidence and data.
12. For enhanced recovery projects, information required by Rule I-4 which is common to more than one well, need be reported only once on the application.

CASING AND TUBING DATA

NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
Surface	8-5/8	1255	80	Surface	Returns
Intermediate None					
Production	5-1/2	5624	250	Surface	Returns
Tubing	2	5436	Name - Type - Depth of Tubing Packer Baker Tension Pkr 5436'		
PB Total Depth 5606	Geologic Name - Inj. Zone Desert Creek		Depth - Top of Inj. Interval 5449'		Depth - Base of Inj. Interval 5598'

(To be filed within 30 days after drilling is completed) 14-20-603-246

COMPLETION & TEST DATA BY PRODUCING FORMATION

DEPARTMENT OF NATURAL RESOURCES AND ENERGY
DIVISION OF OIL, GAS, AND MINING
Room 4241 State Office Building
Salt Lake City, Utah 84114

API NO. 43-037-16 405
640 Acres
N

COUNTY San Juan SEC. 12 TWP. 41S RGE. 23E
COMPANY OPERATING Phillips Petroleum Company
OFFICE ADDRESS P.O. Box 2920
TOWN Casper STATE WY ZIP 82602
FARM NAME -- WELL NO. 12W44
DRILLING STARTED 7-23-56 DRILLING FINISHED 9-5-56
DATE OF FIRST PRODUCTION 9-6-56 COMPLETED 9-6-56
WELL LOCATED SE 1/4 SE 1/4 EL 660 FT. FROM SL OF 1/4 SEC. & 660 FT. FROM WL OF 1/4 SEC.
ELEVATION 4710 FLOOR 4710 GROUND 4699.1

W E S
Locate Well Correctly
and Outline Lease

RKB

TYPE COMPLETION

Single Zone _____
Multiple Zone X
Comingled _____

LOCATION EXCEPTION

OIL OR GAS ZONES

Name	From	To	Name	From	To
Desert Creek I	5449	5532			
Desert Creek II	5543	5598			

CASING & CEMENT

Casing Set				Csg. Test	Cement		
Size	Wgt.	Grade	Feet	Psi	Sax	Fillup	Top
8-5/8	32	J-55	1242	700	395		surface
5-1/2	17	J-55	5624	1500	250		surface

PBTD 5606

TOTAL DEPTH 5614

PACKERS SET

DEPTH Baker Tension Pkr @ 5436

NOTE THIS FORM MUST ALSO BE ATTACHED WHEN FILING PLUGGING FORM DOGM-UIC-4

FORMATION	Desert Creek I & II		
SPACING & SPACING ORDER NO.	40 acre Cause #C-3(B)		
CLASSIFICATION (DISPOSAL WELL, ENHANCED RECOVERY, LP GAS STORAGE)	Enhanced Recovery		
PERFORATED I	5449-53	II 5543-51	
INTERVALS	5468-78	5558-70	
	5495-5500	5578-86	
	5529-32	5590-98	
ACIDIZED?	4-17-69 4000 gal 15% Acid		
FRACTURE TREATED?	No		

INITIAL TEST DATA

Converted to Injector

Date	5-8-65		
Oil, bbl./day	--		
Oil Gravity	--		
Gas, Cu. Ft./day	--	CF	CF
Gas-Oil Ratio Cu. Ft./Bbl.	--		
Water-Bbl./day	2500		
Pumping or Flowing	--		
CHOKE SIZE	--		
FLOW TUBING PRESSURE	Vacuum		

A record of the formations drilled through, and pertinent remarks are presented on the reverse.
(use reverse side)

I, the undersigned, being first duly sworn upon oath, state that this well record is true, correct and complete according to the records of this office and to the best of my knowledge and belief.

Telephone 307-237-3791

A.E. Stuart Area Manager

Name and title of representative of company

Subscribed and sworn before me this _____ day of _____

SEP 22 1956

Casper

WELL: 12044
LOCATION: SESE Sec 12-T41S-R23E
FIELD: GREATER ANGLE
RESERVOIR: Desert Creek I+II

W. COMPLETION: 5.8.65
PRESENT STATUS: S.I.

RKB 4710'
GL 4699'

SURFACE CASING: 8 5/8" 32#
J-55

PRODUCTION CASING: 5 1/2" 17#
J-55

PERFORATIONS:
5449-53 5578-86
5468-78 5590-98
5495-5500
5529-32
5543-51
5558-70

PACKER: Baker Tension
Pkr @ 5436'
Tubing: 2" @ 5436'

5436'

5449'-

5598'

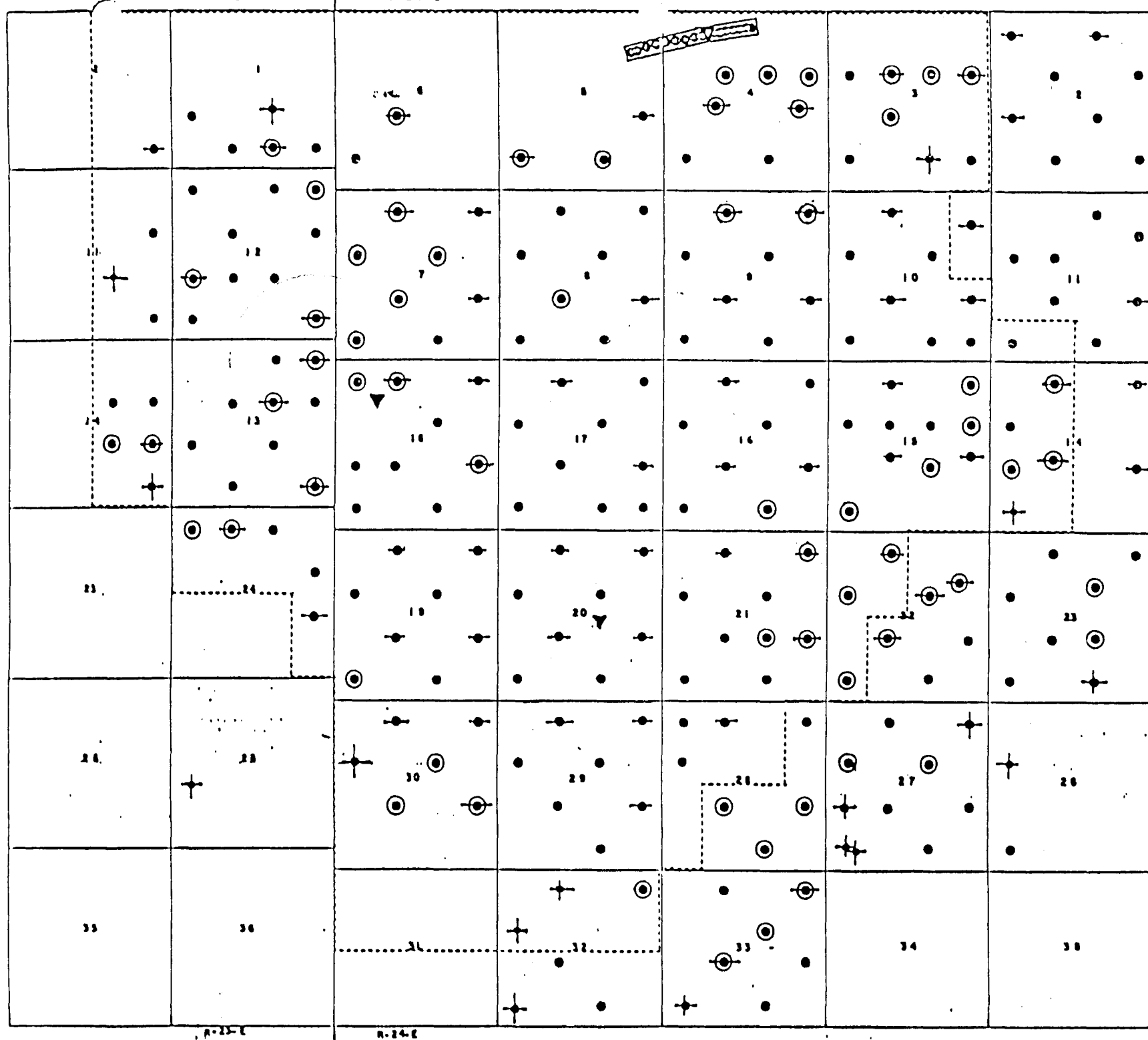
PBTD: 5606'
OTD: 5624'

5624'

Phillips Petroleum Company

R-23-E

R-24-E



RATHERFORD UNIT
 SAN JUAN COUNTY, UTAH
 2" = 1 mile
 RCT 3-83

- oil producer
- water injector
- water supply
- ▽ domestic water
- + plugged & abandoned
- shut in well
- unit boundary

WTE INJECTION WELL

CL1-12A (REV. 1964)

CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 2794
Casper, Wyoming

WATER ANALYSIS REPORT

OPERATOR Phillips Petroleum Co. DATE 5-27-83 LAB NO. W30480
 WELL NO. Rutherford Unit LOCATION _____
 FIELD _____ FORMATION _____
 COUNTY San Juan INTERVAL _____
 STATE Utah SAMPLE FROM _____

REMARKS & CONCLUSIONS: Specific gravity @68°F ----- 1.0646
 Oil and grease, mg/l ----- 2.5
 Aluminum (Al), mg/l ----- 0.90
 Iron (Fe), mg/l ----- 0.3
 Total Sulfides, mg/l ----- ND(0.1)

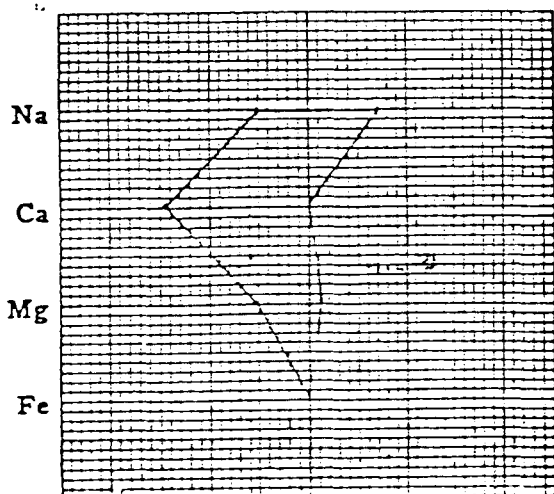
Cations			Anions		
	mg/l	meq/l		mg/l	meq/l
Sodium	24574	1068.99	Sulfate	1190	24.75
Potassium	396	10.14	Chloride	52000	1466.40
Lithium	-	-	Carbonate	0	0.00
Calcium	5982	298.50	Bicarbonate	190	3.12
Magnesium	1419	116.64	Hydroxide	-	-
Iron	-	-	Hydrogen sulfide	-	-
Total Cations		1494.27	Total Anions		1494.27

Total dissolved solids, mg/l ----- 85655
 NaCl equivalent, mg/l ----- 86344
 Observed pH ----- 7.4

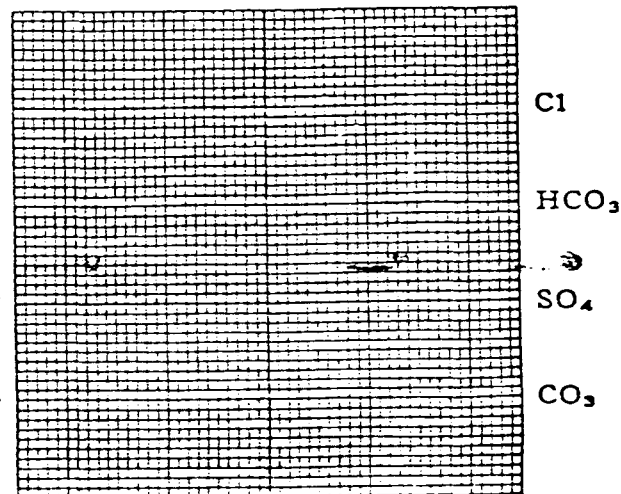
Specific resistance @ 68°F.:
 Observed ----- 0.095 ohm-meters
 Calculated ----- 0.086 ohm-meters

WATER ANALYSIS PATTERN

Scale
 Sample above described MEQ per Unit



Cl 200 Na
 HCO₃ 20 Ca
 SO₄ 20 Mg
 CO₃ 20 Fe



(Na value in above graphs includes Na, K, and Li)
 NOTE: Mg/l = milligrams per liter Meq/l = milliequivalents per liter
 Sodium chloride equivalent = by Dunlap & Hawthorne calculation from components

CL1-12A (REV. 1964).

CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 2794
Casper, Wyoming

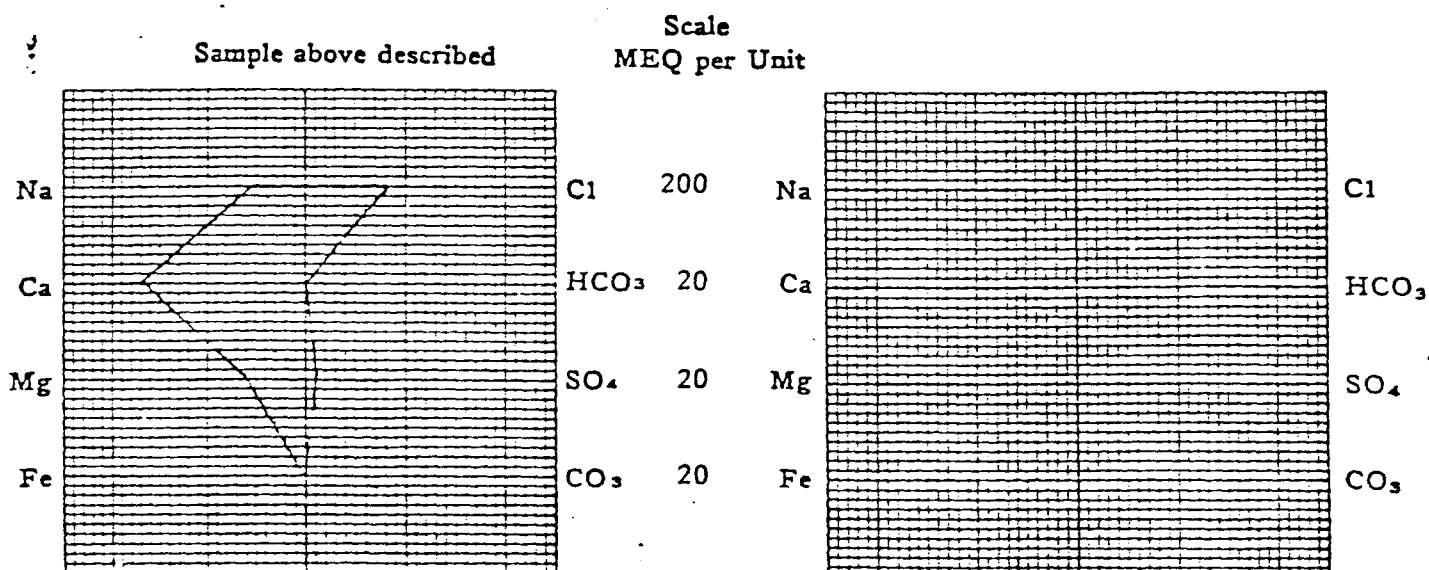
WATER ANALYSIS REPORT

OPERATOR Phillips Petroleum Company DATE 7-22-83 LAB NO. W30636
 WELL NO Ratherford Unit LOCATION _____
 FIELD _____ FORMATION _____
 COUNTY San Juan INTERVAL _____
 STATE Utah SAMPLE FROM Battery #1 Free water knockout
(7-5-83) @ 10:35
S/N 28568

REMARKS & CONCLUSIONS: _____

Cations			Anions		
	mg/l	meq/l		mg/l	meq/l
Sodium	30147	1311.38	Sulfate	1380	28.70
Potassium	429	10.98	Chloride	63000	1776.60
Lithium	--	--	Carbonate	0	0.00
Calcium	6865	342.56	Bicarbonate	151	2.48
Magnesium	1738	124.86	Hydroxide	--	--
Iron	--	--	Hydrogen sulfide	--	--
Total Cations		1807.78	Total Anions		1807.78
Total dissolved solids, mg/l			Specific resistance @ 68°F.:		
			Observed	0.087	ohm-meters
NaCl equivalent, mg/l			Calculated	0.078	ohm-meters
Observed pH					

WATER ANALYSIS PATTERN



(Na value in above graphs includes Na, K, and Li)

NOTE: Mg/l = Milligrams per liter Meq/l = Milligram equivalents per liter

Sodium chloride equivalent = by Dunlap & Hawthorne calculation from components

CHECKLIST FOR INJECTION WELL APPLICATION AND FILE REVIEW

Operator: Phillips Well No. Bethesda Unit 12W44
 County: San Juan T 41S R 23E Sec. 12 API# 43-037-16405
 New Well ☐ Conversion ☐ Disposal Well ☐ Enhanced Recovery Well ☒

	YES	NO
UID Forms Completed	<u>✓</u>	<u> </u>
Plat including Surface Owners, Leaseholders, and wells of available record	<u>✓</u>	<u> </u>
Schematic Diagram	<u>✓</u>	<u> </u>
Fracture Information	<u>✓</u>	<u> </u>
Pressure and Rate Control	<u>✓</u>	<u> </u>
Adequate Geologic Information	<u>✓</u>	<u> </u>
Fluid Source	<u>Desert Creek</u>	

Analysis of Injection Fluid	Yes <u>✓</u> No <u> </u>	TDS <u>85655</u>
Analysis of Water in Formation to be injected into	Yes <u>✓</u> No <u> </u>	TDS <u>103633</u>

Known USDW in area	<u>Wingate</u>	Depth <u>1550</u>
Number of wells in area of review	<u>80</u>	Prod. <u>4</u> P&A <u>0</u>
	Water <u>1</u>	Inj. <u>3</u>

Aquifer Exemption	Yes <u> </u> NA <u>✓</u>
-------------------	-------------------------------

Mechanical Integrity Test	Yes <u> </u> No <u>✓</u>
---------------------------	-------------------------------

Date <u> </u>	Type <u> </u>
--------------------	--------------------

Comments: To c Surface

Reviewed by: *[Signature]*

(November 1983)
(Formerly 9-131)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other last page of form also)

Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT" for such proposals.)

OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> Water Injection Well		RECEIVED JUN 10 1985 DIVISION OF OIL GAS & MINING		1. LEASE IDENTIFICATION AND SERIAL NO. 14-20-603-246	
2. NAME OF OPERATOR Phillips Oil Company				3. IF NEEDS, ALLOTTED OR TRUSS NAME Navajo	
3. ADDRESS OF OPERATOR P.O. Box 2920, Casper, WY 82602				4. UNIT ASSIGNMENT NAME SW-I-4192	
4. LOCATION OF WELL (Report location clearly and in accordance with any State regulations. See also space 17 below.) At surface 600' FSL, 660' FEL, (SESE)				5. NAME OF LEASE NAME Ratherford Unit	
				6. WELL NO. 12W44	
				7. FIELD AND POOL, OR WILDCAT Greater Aneth	
				8. SEC., T., R., N., OR S.E., AND SUBST. OR AREA Sec. 12-T41S-R23E	
14. PERMIT NO. 43-037-16405		15. ELEVATIONS (Show whether SV, HT, OR, etc.) 4710' RKB		12. COUNTY OR PARISH San Juan	
				13. STATE Utah	

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF	<input type="checkbox"/>	PULL OR ALTER CASING	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	MULTIPLE COMPLETE	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input checked="" type="checkbox"/>	ABANDON*	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	CHANGE PLANS	<input type="checkbox"/>
(Other)	Plug back to Zone I		

SUBSEQUENT REPORT OF:

WATER SHUT-OFF	<input type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
FRACTURE TREATMENT	<input type="checkbox"/>	ALTERING CASING	<input type="checkbox"/>
SHOOTING OR ACIDIZING	<input type="checkbox"/>	ABANDONMENT*	<input type="checkbox"/>
(Other)			

(Note: Report results of multiple completion or well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent data, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

It is proposed to convert Ratherford Unit #12W44 from Zone I & II to Zone I water injection. After plugging back to Zone I, the well will be acidized with 3000 gallons of 28% HCL, and returned to injection.

APPROVED BY
OF UTAH DIVISION OF
OIL, GAS, AND MINING
DATE: 6/12/85
BY: [Signature]

A 10' x 8' x 6' fenced pit will be constructed on location in a previously disturbed area. Upon completion of the workover, the pit will be dried and recovered.

5-BLM, Farmington, NM
2-Utah O&G CC, Salt Lake City, Utah
1-P. J. Adamson
1-B. Conner, 318B-TRW
1-J. R. Weichbrodt
1-C. M. Anderson
1-File RC

18. I hereby certify that the foregoing is true and correct

SIGNED [Signature] TITLE Area Manager DATE June 4, 1985
A. E. Stuart

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

UTAH DIVISION OF OIL, GAS AND MINING
CASING-BRADENHEAD TEST

OPERATOR: Phillips Petroleum Company

FIELD: Greater Aneth LEASE: Ratherford Unit

WELL # 12W44 SEC. 12 TOWNSHIP 41S RANGE 23E

STATE (FED) FEE DEPTH 5606 TYPE WELL INJW MAX. INJ. PRESS. _____

SD 3/22/80

TEST DATE 6/17/86

CASING STRING	SIZE	SET AT	CMT	PRESSURE READINGS	REMARKS	FUTURE
<u>SURFACE</u>	<u>8 5/8</u>	<u>1255</u>	<u>80</u>		<u>SI</u>	
<u>INTERMEDIATE</u>	<u>NONE</u>					
<u>PRODUCTION</u>	<u>5 1/2</u>	<u>5624</u>	<u>250</u>			
<u>TUBING</u>	<u>2</u>	<u>5436</u>				
<u>Baker Tension Pkr at 5436'</u>						

CASING STRING	SIZE	SET AT	CMT	PRESSURE READINGS	REMARKS	FUTURE
<u>SURFACE</u>						
<u>INTERMEDIATE</u>						
<u>PRODUCTION</u>						
<u>TUBING</u>						

CASING STRING	SIZE	SET AT	CMT	PRESSURE READINGS	REMARKS	FUTURE
<u>SURFACE</u>						
<u>INTERMEDIATE</u>						
<u>PRODUCTION</u>						
<u>TUBING</u>						

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPPLICATE*
(Other instructions on reverse side)

Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> Water Injector		3. LEASE DESIGNATION AND SERIAL NO. 14-20-603-246-A	
2. NAME OF OPERATOR Phillips Petroleum Company		4. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo	
3. ADDRESS OF OPERATOR P. O. Box 2920, Casper, Wyoming 82602		5. UNIT AGREEMENT NAME SW-I-4192	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 660' FSL & 660' FEL, SE SE		6. FARM OR LEASE NAME Ratherford Unit	
5. ELEVATIONS (Show whether SP, HT, CR, etc.) 4710' RKB		7. WELL NO. 12W44	
6. PERMIT NO. API #43-037-16405		8. FIELD AND POOL, OR WILDCAT Greater Aneth	
7. COUNTY OR PARISH San Juan		9. SEC. T., R., E., M., OR BLK. AND SURVEY OR AREA Sec. 12-T41S-R23E	
8. STATE Utah		10. COUNTY OR PARISH San Juan	
9. STATE Utah		11. COUNTY OR PARISH San Juan	

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PCIL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) Sqz Zone II & Acidize Zone I <input checked="" type="checkbox"/>	
(Other) <input type="checkbox"/>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

August 4, 1986 through September 2, 1986

MI&RU 8/2/86 to sqz Zone II. COOH w/tbg. Fish in hole - 7 jts tbg & packer. Unable to retrieve fish. Pushed fish to TD. Top fish at 5606'. Located casing leak at 5075'-5085'. Prepare to repair casing leak. Set BP at 3200', spot sand on top. Spot 75 gallons 28% HCL acid across casing leak. Pumped acid into casing leak. Set packer at 2875'. Squeezed casing leak (5075'-5085') w/50 sx Class B cmt. WOC. Drilled cmt 2939 to 3185' (sand from BP). Tested squeeze, did not hold. Set packer at 3050'. Spotted acid across casing leak. Pumped 200 sx Class B cmt into & across casing leak. WOC. Drilled cmt from 2890'-3155'. Tested squeeze, hold ok. Retrieved bridge plug. TIH w/bit. Bit stopped at 4035'. Possible collapsed csg. Swedged and milled collapsed casing. Unsuccessful. Shut down operations 9/2/86 pending evaluation.

4-BLM, Farmington, NM
2-Utah O&G CC, SLC, UT
1-M. Williams, B'Ville
1-J. Landrum, Denver
1-J. Reno, Cortez

1-Chieftain
1-Mobil Oil
1-Texaco, Inc.
1-Chevron USA
1-File RC

18. I hereby certify that the foregoing is true and correct

SIGNED D. K. Gill

TITLE Area Manager

DATE December 4, 1986

(This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

DATE _____

*See Instructions on Reverse Side

(November 1983)
(Formerly 9-331)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions on re-
verse side)

Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.

14-20-603-246-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

SW-I-4192

8. FARM OR LEASE NAME

Ratherford Unit

9. WELL NO.

12W44

10. FIELD AND POOL, OR WILDCAT

Greater Aneth

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

Sec. 12-T41S-R23E

12. COUNTY OR PARISH

San Juan

13. STATE

Utah

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1.

OIL WELL ☐ GAS WELL ☐ OTHER Water Injection Well

2. NAME OF OPERATOR

Phillips Petroleum Company

3. ADDRESS OF OPERATOR

P.O. Box 2920, Casper, WY 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)

At surface

660' FSL & 660' FEL (SE SE)

14. PERMIT NO.

43-037-16405

15. ELEVATIONS (Show whether DP, RT, GR, etc.)

4710' RKB

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

SUBSEQUENT REPORT OF:

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(NOTE: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any
proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones perti-
nent to this work.)*

The subject well has collapsed casing at 4035'. An unsuccessful attempt was made to repair this collapsed casing and operations were shut down on 9/2/86. Further work on this well is dependent upon the success of future conversions in this area of the unit. The conversions in this area of the unit are scheduled to be completed by April 30, 1987. A sundry notice will be submitted to your office by May 15, 1987 stating Phillips' intention of remedial work on this well.

5-BLM, Farmington, NM

2-Utah O&G CC, Salt Lake City, Utah

1-P. J. Adamson

1-M. Williams, 302 TRW

1-J. R. Reno

1-B. J. Murphy

1-File RC

APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING
DATE: 1/22/87
BY: [Signature]

JAN 09 1987

DIVISION OF
OIL, GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED

[Signature]
D.C. Gill

TITLE Area Manager

DATE December 29, 1986

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> Water Injection Well		2. NAME OF OPERATOR Phillips Petroleum Company		3. ADDRESS OF OPERATOR P.O. Box 2920, Casper, WY 82602		4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 660' FSL and 660' FEL (SE SE)		5. LEASE DESCRIPTION AND SERIAL NO. 14-20-603-246A		6. IF LESSEE, (ALLOTTEE OR TRIBE NAME) WLV-DSCR Navajo		7. UNIT ASSIGNMENT NAME SW-I-4192 122915		8. NAME OF LEASE NAME Ratherford Unit		9. WELL NO. 12W44		10. FIELD AND POOL, OR WILDCAT Greater Areth		11. SEC., T., R., N., OR S.E. AND SUBSET OR AREA Sec. 12-T41S-R23E		12. COUNTY OR PARISH San Juan		13. STATE Utah	
14. PERMIT NO. 43-037-16405				15. ELEVATIONS (Show whether DP, ST, GR, etc.) 4710' RKB																					

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANE <input type="checkbox"/>
(Other) Repair Collapsed Casing <input checked="" type="checkbox"/>	

SUBSEQUENT REPORT OF:

WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
(Other)	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

It is proposed to repair collapsed casing in the subject well at 4037' - 4234'.
If successful at repairing the collapsed casing, then the subject well will be converted from a Zone I and II to a Zone I water injection well. After plugging back to Zone I, the well will be acidized with 3000 gallons of 28% HCL and returned to injection.
If unsuccessful at repairing the collapsed casing, then the subject well will be plugged and abandoned.

- 5 - BLM, Farmington, NM
- ✓ 2 - Utah O&G CC, Salt Lake City, Utah
- 1 - P.J. Konkell
- 1 - M. Williams, 302 TRW
- 1 - J.R. Reno
- 1 - B.J. Murphy
- 1 - File RC

18. I hereby certify that the foregoing is true and correct

SIGNED D.C. Gill D.C. Gill TITLE Area Manager DATE 11-6-87

(This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

Federal approval of this action
is required before commencing
operations.

*See Instructions on Reverse Side

ACCEPTED BY DATE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING

DATE: 11-12-87
BY: R. B. Boye

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions
reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <u>Water Injection Well</u>		5. LEASE DESIGNATION AND SERIAL NO. <u>14-20-603-246A</u>	
2. NAME OF OPERATOR <u>Phillips Petroleum Company</u>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME <u>Navajo</u>	
3. ADDRESS OF OPERATOR <u>P. O. Box 1150, Cortez, CO 81321</u>		7. UNIT AGREEMENT NAME <u>SW - I - 4192</u>	
4. LOCATION OF WELL (Report location clearly and in accordance with applicable requirements. See also space 17 below.) At surface <u>660' FSL & 660' FEL (SE SE)</u>		8. FARM OR LEASE NAME <u>Ratherford Unit</u>	
14. PERMIT NO. <u>43-037-16405</u>		9. WELL NO. <u>12W44</u>	
15. ELEVATIONS (Show whether DF, RT, GR, etc.) <u>4710' RKB</u>		10. FIELD AND POOL, OR WILDCAT <u>Greater Aneth</u>	
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA <u>Sec. 12-T41S-R23E</u>	
		12. COUNTY OR PARISH <u>San Juan</u>	
		13. STATE <u>Utah</u>	

RECEIVED
DEC 12 1988

DIVISION OF
OIL, GAS & MINING

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

FRACTURE TREAT

MULTIPLE COMPLETION

SHOOT OR ACIDIZE

ABANDON*

REPAIR WELL

CHANGE PLANS

(Other)

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREATMENT

ALTERING CASING

SHOOTING OR ACIDIZING

ABANDONMENT*

(Other)

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

It is proposed to plug and abandon the subject well. Attempts to recompleate Ratherford Unit #12W44 began on August 3, 1986. Upon pulling the tubing from the well, a casing leak was found at 3075' - 3085' and successfully squeezed. A subsequent bit and scraper run indicated parted casing at 4035'. Attempts to swedge and realign the parted casing proved unsuccessful. Subsequent evaluation revealed that the swedge had not entered the casing, but had instead collapsed the casing for some 198'. Further attempts to enter the well with various fishing tool assemblies also proved unsuccessful, and operations were suspended on September 3, 1986. It is thought that further attempts to recompleate the well are futile. On attachments find plug and abandonment procedure for your information.

5-BLM, Farmington, NM
2-Utah O & G CC, Salt Lake City, UT
1-P. J. Konkell, Casper
1-M. Williams, 302 TRW
1-M. L. Menghini
1-M. L. Paustian
1-Cortez Office - RC

Accepted by the State
of Utah Division of
Oil, Gas and Mining

Date: December 15, 1988

By: For Record Purposes only

18. I hereby certify that the foregoing is true and correct

SIGNED

M. L. Menghini
M. L. Menghini

TITLE Cortez District Superintendent DATE December 5, 1988

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

Federal Approval of this
Action is Necessary

*See Instructions on Reverse Side

Ratherford Unit Well #12W44

PBTD: 5606', parted at 4037'

MTD: 5624'

Elevation: 4710' RKB

Production Casing: 5-1/2", 17#, set at 5614'

Surface Casing: 8-5/8", 32#, set at 1255'

Est. TOC: 3920'

Perfs: Zone I -- 5449'-5453', 5468'-5478', 5495'-5500', 5529'-5532'

Zone II -- 5543'-5551', 5558'-5570', 5578'-5586', 5590'-5598'

1. Test anchors, MI, RU WSU. Hold and record safety meeting.
2. Bleed off pressure, test for H₂S. ND WH & NU 3000# BOP.
3. RIH w/bit and scraper to 4000', circulate until returns clean up.
4. POOH. RIH w/cement retainer, set at 4000'.
5. Test retainer, sting out to ensure that setting tool will release.
6. MI, RU cementers. Hold safety meeting. Test surface lines to 3500 psi
7. Sting into retainer, establish water injection rate and pressure down tubing. Pressure annulus to 500 psi and maintain throughout job.
8. Mix and pump 300 sx Class "B" cement (yield 1.18 ft³/sk).
9. Displace cement with 22 bbl, 9.6 ppg mud. Raise tubing 3 jts. to close retainer. Spot remaining cement on retainer.. Raise tubing 5 stands.
10. Reverse circulate w/120 bbl., 9.6 ppg mud to fill hole with mud.
11. WOC 4 hours, RIH to tag top of cement @ 3800'. POOH.
12. RIH w/tubing open-ended to top of cement. Mix and pump 50 sx Class "B" cement, displaced w/19 bbl., 9.6 ppg mud to spot balanced plug from 3800', to 3370'. POOH w/tubing 12 stands, reverse circulate 40 bbl, w/9.6 ppg mud.
13. RIH w/tubing to tag Hermosa plug at approximately 3370'. POOH.
14. MI & RU wireline perforators. Install lubricator, GIH w/1 each 1' long, 4" diameter HSC gun, w/5 each 19 gm charges per foot.
15. Fire gun at 1300', 45' below casing shoe. POOH and RD perforators.
16. Establish circulation down 5-1/2" and up 8-5/8" casing with 9.6 ppg mud until returns clean up.
17. Mix and pump 365 sx Class "B" cement to create a balanced plug in 5-1/2" casing and 5-1/2" - 8-5/8" annulus from 1300' to surface.
18. Weld 3/8" thick steel plate on 8-5/8" casing. Install a permanent monument in the wellbore as per BLM and Utah specifications and restore location.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER WATER INJECTION & WATER SUPPLY WELLS		6. LEASE DESIGNATION AND SERIAL NO. SW-I-4192
2. NAME OF OPERATOR PHILLIPS PETROLEUM COMPANY		7. UNIT AGREEMENT NAME RATHERFORD UNIT #7960041920
3. ADDRESS OF OPERATOR 152 N. DURBIN, 2ND FLOOR, CASPER, WYOMING 82601		8. FARM OR LEASE NAME
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface <u>SEE ATTACHED</u>		9. WELL NO. VARIOUS (see attached)
14. PERMIT NO.		10. FIELD AND POOL, OR WILDCAT GREATER ANETH
15. ELEVATIONS (Show whether DF, RT, OR, etc.) OIL, GAS & MINING		11. SEC., T., R., N., OR BLK. AND SURVEY OR AREA Sections 1 thru 30 T41S - R23E & 24E
		12. COUNTY OR PARISH 13. STATE San Juan Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) CHANGE OF OWNERSHIP <input checked="" type="checkbox"/>	
(Other) <input type="checkbox"/>		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

This is to advise all Water Injection and Water Supply Wells on the Ratherford Unit, listed on the attached sheet, were sold to Phillips Petroleum Company, effective August 1, 1985.

(former Operator - Phillips Oil Company)

3 - BLM, Farmington, NM
2 - Utah O&G CC, SLC, UT
1 - File

18. I hereby certify that the foregoing is true and correct

SIGNED <u>S. H. Oden</u>	TITLE <u>District Superintendent</u>	DATE <u>March 17, 1989</u>
--------------------------	--------------------------------------	----------------------------

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

DOWNHOLE SCHEMATIC

Date: 8/6/87

RATHERFORD Unit # 12W44

RKB Elev. 4710'

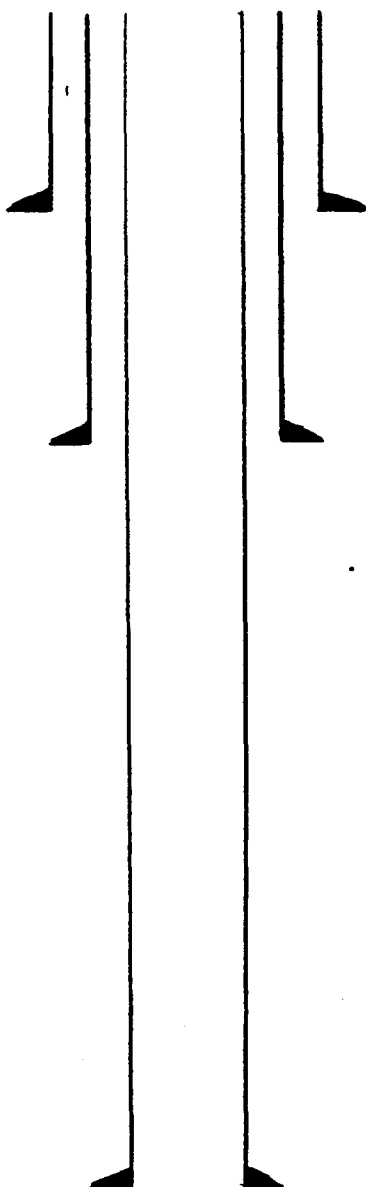
GL Elev. 4699'

RKB Above GL' 11'

Location SE SE Sec. 12
T41S-R23E

Well Drld 9/4/56

Well converted
to injector 5/8/65



CONDUCTOR CSG @ 1'

SURFACE CSG. 8 5/8\" @ 1,255'

TOC 3911' CALC

Tubing 2\" @ 5603' MARLY LINED

PACKER BAKER Lok-set @ 5603'

PERFS	<u>5,449 - 53</u>	<u>5558 - 5570</u>
	<u>5,468 - 78</u>	<u>5550 - 5598</u>
	<u>5,495 - 5500</u>	<u> - </u>
	<u>5543 - 5551</u>	<u> - </u>

PBTD 5,603'

PRODUCTION CSG. 5 1/2\" @ 5614'
J-55, 17#

All Perfs Zone I unless noted

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions on re-
verse side)

Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> Water Injector		2. LEASE DESIGNATION AND SERIAL NO. 14-20-603-246A	
3. NAME OF OPERATOR Phillips Petroleum Company		4. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo	
5. ADDRESS OF OPERATOR P. O. Box 1150, Cortez, CO 81321		6. UNIT AGREEMENT NAME SW-I-4192	
7. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 660' FSL & 660' FEL, SE SE		8. FARM OR LEASE NAME Ratherford Unit	
9. PERMIT NO. API #43-037-16405		10. WELL NO. 12W44	
11. ELEVATIONS (Show whether SP, ST, OR, etc.) 4710' RKB		12. FIELD AND POOL, OR WILDCAT Greater Aneth	
13. COUNTY OR PARISH San Juan		14. STATE Utah	
15. SEC. T. R. M. OR S.W. AND SUBST OR AREA Sec. 12-T41S-R23E			

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐
FRACTURE TREAT ☐
SHOOT OR ACIDIZE ☐
REPAIR WELL ☐
(Other) ☐

RELL OR ALTER CASING ☐
MULTIPLE COMPLETE ☐
ABANDON* ☐
CHANGE PLANE ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐
FRACTURE TREATMENT ☐
SHOOTING OR ACIDIZING ☐
(Other) ☐

REPAIRING WELL ☐
ALTERING CASING ☐
ABANDONMENT* ☒

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent data, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

January 16, 1990 Thru January 18, 1990

MI & RU well service unit 1/16/90. ND wellhead, NU BOPs. GIH w/bit, scraper, and 129 jts tbg to 4013'. Circ well clean. Could not establish inj rate. COOH w/tbg, bit, and scraper. GIH w/129 jts 2-7/8" tbg open ended to 4007'. Mixed and pumped 275 sx Class G neat cmt plug from 4007' to 1537'. COOH w/40 stds tbg. Reverse out 1 bbl slurry. Pulled remaining tbg and dug out cellar. TIH w/tbg open ended and tagged cmt at 1527'. Perforated 1512-1513' with five 19 gram chgs in 4" HSC gun. Est circ and pmpd 410 sx Class G neat cmt plug, 15.8 ppg, down 5-1/2" and up 8-5/8" csg to surface. RD & MO well service unit. Installed permanent dry hole marker and restored surface location except for seeding. Well plugged and abandoned 1/18/90.

Distribution:

5 - BLM, Farmington	1 - Chieftain
2 - Utah O&GCC	1 - Mobil Oil
1 - N. Anstine	1 - Texaco, Inc
1 - V. S. Shaw	1 - Chevron, Inc
1 - S. H. Oden	1 - Cortez Office
1 - E. D. Hasely	1 - Houston Office
1 - P. J. Konkell	

UIC	
GLH	<input checked="" type="checkbox"/>
DJ	<input type="checkbox"/>
BA	<input type="checkbox"/>
COMPUTER	<input type="checkbox"/>
MICROFILM	<input type="checkbox"/>
FILE	<input type="checkbox"/>

OIL AND GAS	
DRN	RIF
JRB	1 - GLH <input checked="" type="checkbox"/>
DTS	SLS
2-TAS	
3-MICROFILM 1/29/90	
4-DIC FILE	

18. I hereby certify that the foregoing is true and correct

SIGNED

S. H. Oden

TITLE District Superintendent

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

*See Instructions on Reverse Side

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

Page 1 of 10

MONTHLY OIL AND GAS PRODUCTION REPORT

OPERATOR NAME AND ADDRESS:

P J KONKEL
PHILLIPS PETROLEUM COMPANY
5525 HWY 64 NBU 3004
FARMINGTON NM 87401

RECEIVED

AUG 16 1993

ACCOUNT NUMBER: N0772

REPORT PERIOD (MONTH/YEAR):

6 / 93

DIVISION OF
OIL, GAS & MININGAMENDED REPORT ☐ (Highlight Changes)

Well Name						Producing Zone	Well Status	Days Oper	Production Volumes		
API Number	Entity	Location							OIL(BBL)	GAS(MCF)	WATER(BBL)
#21-23											
4303713754	06280	41S	24E	21		DSCR	POW	29	1374	883	58
#3-44											
4303715031	06280	41S	24E	3		DSCR	POW	30	111	94	2905
#3-14											
4303715124	06280	41S	24E	3		DSCR	POW	30	67	23	302
#9-12											
4303715126	06280	41S	24E	9		DSCR	POW	30	112	654	17363
#9-14											
4303715127	06280	41S	24E	9		DSCR	POW	30	201	315	423
#28-12											
4303715336	06280	41S	24E	28		PRDX	POW	29	112	47	2428
#29-12											
4303715337	06280	41S	24E	29		PRDX	POW	29	56	0	672
#29-32											
4303715339	06280	41S	24E	29		DSCR	POW	29	1402	287	2224
#29-34											
4303715340	06280	41S	24E	29		DSCR	POW	29	757	48	0
#30-32											
4303715342	06280	41S	24E	30		DSCR	POW	29	588	1049	3744
#3-12											
4303715620	06280	41S	24E	3		DSCR	POW	30	268	11	363
#9-34											
4303715711	06280	41S	24E	9		DSCR	POW	30	45	46	9800
#10-12											
4303715712	06280	41S	24E	10		DSCR	POW	30	45	23	1088
TOTALS									5138	3480	41370

COMMENTS:

Effective July 1, 1993, Phillips Petroleum Company has sold its interest in the

Ratherford Unit to Mobil Exploration and Producing U.S., Incorporated, P. O. Box

633, Midland, Texas 79702. Mobil assumed operations on July 1, 1993.

I hereby certify that this report is true and complete to the best of my knowledge.

Date: 8/11/93

Name and Signature: PAT KONKEL

Pat Konkell

Telephone Number: 505 599-3452

MONTHLY OIL AND GAS DISPOSITION REPORT

OPERATOR NAME AND ADDRESS:

L B Sheffield

BRIAN BERRY

~~MOBIL~~POB 219031 1807A RENTWY *P.O. DRAWER G*DALLAS TX 75221-9031 *CORTEZ, Co. 81321*UTAH ACCOUNT NUMBER: N7370REPORT PERIOD (MONTH/YEAR): 7 / 93AMENDED REPORT ☐ (Highlight Changes)**931006 updated.
See*

ENTITY NUMBER	PRODUCT	GRAVITY	BEGINNING INVENTORY	VOLUME PRODUCED	DISPOSITIONS				ENDING INVENTORY
		BTU			TRANSPORTED	USED ON SITE	FLARED/VENTED	OTHER	
05980	OIL			177609	177609	0			
	GAS			72101	66216	5885			
11174	OIL								
	GAS								
	OIL								
	GAS								
	OIL								
	GAS								
	OIL								
	GAS								
	OIL								
	GAS								
	OIL								
	GAS								
TOTALS				249710	243825	5885			

COMMENTS: *PLEASE NOTE ADDRESS change. Mobil ~~new~~ PRODUCTION Reports will be compiled and sent from the Cortez, Co. Office IN THE FUTURE.*

I hereby certify that this report is true and complete to the best of my knowledge.

Name and Signature:

Lwell B Sheffield

Date:

9/5/93

Telephone Number:

*303.865.2212
244.658.2528*

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS <small>(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)</small>		5. LEASE DESIGNATION & SERIAL NO. 6. IF INDIAN ALLOTTEE OR TRIBE NAME NAVAJO TRIBAL	
1. OIL <input type="checkbox"/> GAS <input type="checkbox"/> WELL <input type="checkbox"/> WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		7. UNIT AGREEMENT NAME RATHERFORD UNIT	
2. NAME OF OPERATOR MOBIL OIL CORPORATION		8. FARM OR LEASE NAME	
3. ADDRESS OF OPERATOR P. O. BOX 633 MIDLAND, TX 79702		9. WELL NO.	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface At proposed prod. zone		10. FIELD AND POOL, OR WILDCAT GREATER ANETH	
14. API NO.		15. ELEVATIONS (Show whether DF, RT, CR, etc.)	
12. COUNTY SAN JUAN		13. STATE UTAH	

16.

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐FRACTURE TREAT ☐SHOOT OR ACIDIZE ☐REPAIR WELL ☐(Other) ☐PULL OR ALTER CASING ☐MULTIPLE COMPLETE ☐ABANDON ☐CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐FRACTURE TREATMENT ☐SHOOTING OR ACIDIZING ☐(Other) CHANGE OF OPERATOR ☐

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

REPAIRING WELL ☐ALTERING CASING ☐ABANDONMENT* ☐

APPROX. DATE WORK WILL START _____

DATE OF COMPLETION _____

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

* Must be accompanied by a cement verification report.

AS OF JULY1, 1993, MOBIL OIL CORPORATION IS THE OPERATOR OF THE RATHERFORD UNIT.
ATTACHED ARE THE INDIVIDUAL WELLS.

18. I hereby certify that the foregoing is true and correct.

SIGNED

Shirley Todd

TITLE

ENV. & REG TECHNICIAN

DATE

9-8-93

(This space for Federal or State Office use)

APPROVED BY _____

TITLE _____

DATE _____

CONDITIONS OF APPROVAL, IF ANY:

See Instructions On Reverse Side

*12W-44	43-037-16405	14-20-603-246A	SEC. 12, T41S, R23E	SE/SE 660 FSL; 660 FEL	PA'd
12W-44A	43-037-31543	14-20-603-246A	SEC. 12, T41S, R23E	SE/SE 807 FEL; 772 FSL	
13-11W	43-037-31152	14-20-603-247A	SEC. 13, T41S, R23E	NW/NW 500 FNL; 660 FWL	
13-12	43-037-31127	14-20-603-247A	SEC. 13, T41S, R23E	SW/NW 1705 FNL; 640 FWL	
13W-13	43-037-15851	14-20-603-247A	SEC. 13, T41S, R23E	NW/SW 1980 FSL; 4620 FEL	
13-14	43-037-31589	14-20-603-247A	SEC. 13, T41S, R23E	660 FSL; 660 FWL	
13-21	43-037-31128	14-20-603-247A	SEC. 13, T41S, R23E	NE/NW 660 FNL; 1920 FWL	
13W-22	43-037-15852	14-20-603-247A	SEC. 13, T41S, R23E	SE/NW 1988 FNL; 3300 FEL	
13-23	43-037-31129	14-20-603-247A	SEC. 13, T41S, R23E	NE/SW 1980 FSL; 1930 FWL	
13W-44	43-037-15853	14-20-603-247	SEC. 13, T41S, R23E	660 FSL; 3300 FEL	
13W-32	43-037-16406	14-20-603-247A	SEC. 13, T41S, R23E	1881 FNL; 1979 FEL	
13W-33	43-037-15855	14-20-603-247A	SEC. 13, T41S, R23E	NW/SE 1970 FSL; 1979 FEL	
13W-34	43-037-31130	14-20-603-247A	SEC. 13, T41S, R23E	SW/SE 660 FSL; 1980 FEL	
13-41	43-037-15856	14-20-603-247A	SEC. 13, T41S, R23E	NE/NE 660 FNL; 660 FEL	
13W-42	43-037-15857	14-20-603-247A	SEC. 13, T41S, R23E	SE/NE 2139; 585 FEL	
13-43	43-037-31131	14-20-603-247A	SEC. 13, T41S, R23E	NE/SE 1700 FSL; 960 FEL	
13W-44	43-037-16407	14-20-603-247A	SEC. 13, T41S, R23E	SE/SE 635 FSL; 659 FEL	
14-02	NA	14-20-603-4037	SEC. 14, T41S, R23E	SW/SW 660 FSL; 660 FEL	
14-32	43-037-15858	14-20-603-247A	SEC. 14, T41S, R23E	2130 FNL; 1830 FEL	
14-41	43-037-31623	14-20-603-247A	SEC. 14, T41S, R23E	NE/NE 521 FEL; 810 FNL	
14W-42	43-037-15860	14-20-603-247A	SEC. 14, T41S, R23E	SE/NE 1976 FNL; 653 FEL	
14W-43	43-037-16410	14-20-603-247A	SEC. 14, T41S, R23E	3300 FSL; 4770 FEL	
14-33	43-037-15859	14-20-603-247	SEC. 14, T41S, R23E	2130 FSL; 1830 FEL	
15-12	43-037-15715	14-20-603-355	SEC. 15, T41S, R24E	1820 FNL; 500 FWL	
15W-21	43-037-16411	14-20-603-355	SEC. 15, T41S, R24E	660 FNL; 1820 FWL	
15-22	43-037-30449	14-20-603-355	SEC. 15, T41S, R24E	SE/NW, 1980 FNL; 2050 FWL	
15-32	43-037-15717	14-20-603-355A	SEC. 15, T41S, R24E	1980 FNL; 1980 FEL	
15-33	43-037-15718	14-20-603-355	SEC. 15, T41S, R24E	NW/SE 1650 FSL; 1980 FEL	
15-41	43-037-15719	14-20-603-355	SEC. 15, T41S, R24E	660 FNL; 660' FEL	
15-42	43-037-30449	14-20-603-355	SEC. 15, T41S, R24E	SE/NE 2020 FNL; 820 FEL	
16W-12	43-037-15720	14-20-603-355	SEC. 16, T41S, R24E	SW/NW 1880 FNL; 660 FWL	
16-13	43-037-31168	14-20-603-355	SEC. 16, T41S, R24E	1980 FSL; 660 FWL	
16W-14	43-037-15721	14-20-603-355	SEC. 16, T41S, R24E	SW/SW 660 FSL; 660 FWL	
16W-21	43-037-16414	14-20-603-355	SEC. 16, T41S, R24E	NE/NW 660 FNL; 1880 FWL	
16W-23	43-037-15722	14-20-603-355	SEC. 16, T41S, R24E	NE/SW 1980 FSL; 1980 FWL	
16-32	43-037-15723	14-20-603-355	SEC. 16, T41S, R24E	1980 FNL; 1980' FEL	
16-34	43-037-15724	14-20-603-355	SEC. 16, T41S, R24E	660 FNL; 1980' FEL	
16-41	43-037-15725	14-20-603-355	SEC. 16, T41S, R24E	660 FNL; 660 FEL	
16W-43	43-037-16415	14-20-603-355	SEC. 16, T41S, R24E	NE/SE 2140 FSL; 820 FEL	
17-11	43-037-31169	14-20-603-353	SEC. 17, T41S, R24E	NW/NW 1075' FNL; 800' FWL	
17W-12	43-037-15726	14-20-603-353	SEC. 17, T41S, R24E	SW/NW 1980' FNL; 510' FWL	
17-13	43-037-31133	14-20-603-353	SEC. 17, T41S, R24E	NW/SW 2100' FSL; 660' FWL	
17W-14	43-037-15727	14-20-603-353	SEC. 17, T41S, R24E	SW/SW 660' FSL; 660' FWL	
17W-21	43-037-16416	14-20-603-353	SEC. 17, T41S, R24E	510' FNL; 1830' FWL	
17-22	43-037-31170	14-20-603-353	SEC. 17, T41S, R24E	1980' FNL; 1980' FWL	
17W-23	43-037-15728	14-20-603-353	SEC. 17, T41S, R24E	NE/SW 1980' FWL; 1880' FSL	
17-31	43-037-31178	14-20-603-353	SEC. 17, T41S, R24E	NW/NE 500' FNL; 1980' FEL	
17-32W	43-037-15729	14-20-603-353	SEC. 17, T41S, R24E	SW/NE 1830' FNL; 2030' FEL	
17-33	43-037-31134	14-20-603-353	SEC. 17, T41S, R24E	NW/SE 1980' FSL; 1845' FEL	
17-34W	43-037-15730	14-20-603-353	SEC. 17, T41S, R24E	SW/SE 560' FSL; 1880' FEL	
17W-41	43-037-15731	14-20-603-353	SEC. 17, T41S, R24E	610' FNL; 510' FEL	
17-42	43-037-31177	14-20-603-353	SEC. 17, T41S, R24E	SE/NE 1980; FNL, 660' FEL	
17-44	43-037-15732	14-20-603-353	SEC. 17, T41S, R24E	660 FSL; 660' FEL	
17W-43	43-037-16417	14-20-603-353	SEC. 17, T41S, R24E	NE/SE 1980' FSL; 660' FEL	
18-11	43-037-15733	14-20-603-353	SEC. 18, T41S, R24E	NW/NW 720' FNL; 730' FWL	
18-12W	43-037-31153	14-20-603-353	SEC. 18, T41S, R24E	SW/NW 1980' FNL; 560' FWL	
18W-21	43-037-16418	14-20-603-353	SEC. 18, T41S, R24E	NE/NW 660' FNL; 1882' FWL	
18-22	43-037-31236	14-20-603-353	SEC. 18, T41S, R24E	SW/NW 2200' FNL; 2210' FWL	
18W-23	43-037-30244	14-20-603-353	SEC. 18, T41S, R24E	NE/SW 2385' FSL; 2040' FWL	
18W-14	43-037-15735	14-20-603-353	SEC. 18, T41S, R24E	SW/SW 810' FSL; 600' FWL	
18-24	43-037-31079	14-20-603-353	SEC. 18, T41S, R24E	SE/SW 760' FSL; 1980' FWL	
18-31	43-037-31181	14-20-603-353	SEC. 18, T41S, R24E	NW/NE 795' FNL; 2090' FEL	
18W-32	43-037-15736	14-20-603-353	SEC. 18, T41S, R24E	SW/NE 2140' FNL; 1830' FEL	
18-33	43-037-31135	14-20-603-353	SEC. 18, T41S, R24E	NW/SE 1870' FSL; 1980' FEL	
18-34W	43-037-15737	14-20-603-353	SEC. 18, T41S, R24E	SW/SE 780' FSL; 1860 FEL	
18W-41	43-037-15738	14-20-603-353	SEC. 18, T41S, R24E	NE/NE 660' FNL; 660' FEL	
18-42	43-037-31182	14-20-603-353	SEC. 18, T41S, R24E	SE/NE 2120' FNL; 745' FEL	
18W-43	43-037-16419	14-20-603-353	SEC. 18, T41S, R24E	NE/SE 1980' FSL; 660' FEL	PA'd
18-44	43-037-31045	14-20-603-353	SEC. 18, T41S, R24E	SE/SE 660' FSL; 660' FEL	
19-11	43-037-31080	14-20-603-353	SEC. 19, T41S, R24E	NW/NW 660' FNL; 660' FWL	
19-12	43-037-15739	14-20-603-353	SEC. 19, T41S, R24E	600' FWL; 1980' FNL	
19-14	43-037-15740	14-20-603-353	SEC. 19, T41S, R24E	600' FSL; 660' FEL	

Sept 29, 1993

TO: Lisha Cordova - Utah Mining
Oil & Gas

FROM: Janice Easley
BLM Farmington, NM
505 599-6355

Here is copy of Rutherford Unit
Successor Operator.

4 pages including this one.

*File: Ratherford Unit (GC)*RECEIVED
BLM

JUL 27 AM 11:44

Navajo Area Office
P. O. Box 1060
Gallup, New Mexico 87305-1060

070 FARMINGTON, NM

ARES/543

JUL 28 1993

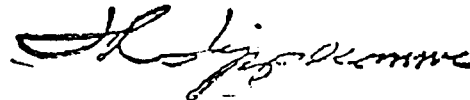
Mr. G. D. Cox
Mobil Exploration and
Producing North America, Inc.
P. O. Box 633
Midland, Texas 79702

Dear Mr. Cox:

Enclosed for your information and use is the approved Designation of Operator between the Phillips Petroleum Company and Mobil Exploration and Producing North America, Inc. for the Ratherford Unit.

Please note that all other concerned parties will be furnished their copy of the approved document.

Sincerely,



ACTING Area Director

Enclosure

cc: Bureau of Land Management, Farmington District Office w/enc.
TNN, Director, Minerals Department w/enc.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS

RECEIVED
BLM

DESIGNATION OF OPERATOR

Phillips Petroleum Company is, on the records of the Bureau of Indian Affairs, operator of the Ratherford Unit, 62-8-27-6011-44

AREA OFFICE: Window Rock, Arizona
LEASE NO: Attached hereto as Exhibit "A"

070 FARMINGTON, NM

and, pursuant to the terms of the Ratherford Unit Agreement, is resigning as Unit Operator effective July 1, 1993, and hereby designates

NAME: Mobil Exploration and Producing North America Inc., duly elected pursuant to the terms of the Ratherford Unit Agreement,

ADDRESS: P. O. Box 633, Midland, Texas 79702
Attn: G. D. Cox

as Operator and local agent, with full authority to act on behalf of the Ratherford Unit lessees in complying with the terms of all leases and regulations applicable thereto and on whom the authorized officer may serve written or oral instructions in securing compliance with the Operating Regulations (43 CFR 3160 and 25 CFR 211 and 212) with respect to (described acreage to which this designation is applicable):

Attached hereto as Exhibit "A"

Bond coverage under 25 CFR 211, 212 or 225 for lease activities conducted by the above named designated operator is under Bond Number 05202782 (attach copy). Evidence of bonding is required prior to the commencement of operations.

It is understood that this designation of operator does not relieve any lessee of responsibility for compliance with the terms of the leases and the Operating Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the leases.

In case of default on the part of the designated operator, the lessees will make full and prompt compliance with all regulations, lease terms, stipulations, or orders of the Secretary of the Interior or his representative.

Attached is the appropriate documentation relevant to this document.

The designated operator agrees to promptly notify the authorized officer of any change in the operatorship of said Ratherford Unit.

Phillips Petroleum Company

June 17, 1993

By: M. B. [Signature]
Attorney-in-Fact

Mobil Exploration and Producing
North America Inc.

June 11, 1993

By: B. D. Martiny
Attorney-in-Fact B.D. MARTINY

[Signature] ACTING AREA DIRECTOR
APPROVED BY TITLE DATE
7/9/93

APPROVED PURSUANT, TO SECRETARIAL REDELEGATION ORDER 209 DM 8 AND 230 DM 3.

This form does not constitute an information collection as defined by 44 U.S.C. 3502 and therefore does not require OMB approval.

EXHIBIT "A"

ATTACHED TO AND MADE A PART OF DESIGNATION OF SUCCESSOR OPERATOR, RATHERFORD UNIT

EXHIBIT "C"

Revised as of September 29, 1992
SCHEDULE OF TRACT PERCENTAGE PARTICIPATION

<u>Tract Number</u>	<u>Description of Land</u>	<u>Serial Number and Effective Date of Lease</u>	<u>Tract Percentage Participation</u>
1	S/2 Sec. 1, E/2 SE/4 Sec. 2, E/4 Sec. 11, and all of Sec. 12, T-41-S, R-23-E, S.L.M., San Juan County, Utah	14-20-603-246-A Oct. 5, 1953	11.0652565
2	SE/4 and W/2 SW/4 Sec. 5, the irregular SW/4 Sec. 6, and all of Sec. 7 and 8, T-41-S, R-24-E, San Juan County, Utah	14-20-603-368 Oct. 26, 1953	14.4159942
3	SW/4 of Sec. 4, T-41-S, R-24-E, San Juan County, Utah	14-20-603-5446 Sept. 1, 1959	.5763826
4	SE/4 Sec. 4, and NE/4 Sec. 9, T-41-S, R-24-E, San Juan County, Utah	14-20-603-4035 March 3, 1958	1.2587779
5	SW/4 of Sec. 3, T-41-S, R-24-E, S.L.M., San Juan County, Utah	14-20-603-5445 Sept. 3, 1959	.4667669
6	NW/4 of Sec. 9, T-41-S, R-24-E, S.L.M., San Juan County, Utah	14-20-603-5045 Feb. 4, 1959	1.0187043
7	NW/4, W/2 NE/4, and SW/4 Sec. 10, SE/4 Sec. 9, T-41-S, R-24-E, San Juan County, Utah	14-20-603-4043 Feb. 18, 1958	3.5097575
8	SW/4 Sec. 9, T-41-S, R-24-E, S.L.M., San Juan County, Utah	14-20-603-5046 Feb. 4, 1959	1.1141679
9	SE/4 Sec. 10 and S/2 SW/4 Sec. 11 T-41-S, R-24-E, San Juan County, Utah	14-20-603-4037 Feb. 14, 1958	2.6186804
10	All of Sec. 13, E/2 Sec. 14, and E/2 SE/4 and N/2 Sec. 24, T-41-S, R-23-E, S.L.M., San Juan County, Utah	14-20-603-247-A Oct. 5, 1953	10.3108861
11	Sections 17, 18, 19 and 20, T-41-S, R-24-E, San Juan County Utah	14-20-603-353 Oct. 27, 1953	27.3389265
12	Sections 15, 16, 21, and NW/4, and W/2 SW/4 Sec. 22, T-41-S, R-24-E, San Juan County, Utah	14-20-603-355 Oct. 27, 1953	14.2819339
13	W/2 Section 14, T-41-S, R-24-E, San Juan County, Utah	14-20-603-370 Oct. 26, 1953	1.8500847
14	N/2 and SE/4, and E/2 SW/4 Sec. 29, NE/4 and E/2 SE/4 and E/2 W/2 irregular Sec. 30, and E/2 NE/4 Sec. 32, T-41-S, R-24-E, San Juan County, Utah	14-20-603-407 Dec. 10, 1953	6.9924969
15	NW/4 Sec. 28, T-41-S, R24-E San Juan County, Utah	14-20-603-409 Dec. 10, 1953	.9416393
16	SE/4 Sec. 3, T-41-S, R-24-E San Juan County, Utah	14-20-0603-6504 July 11, 1961	.5750254
17	NE/4 Sec. 3, T-41-S, R-24-E San Juan County, Utah	14-20-0603-6505 July 11, 1961	.5449292
18	NW/4 Sec. 3, T-41-S, R-24-E San Juan County, Utah	14-20-0603-6506 July 11, 1961	.5482788
19	NE/4 Sec. 4, T-41-S, R24-E San Juan County, Utah	14-20-0603-7171 June 11, 1962	.4720628
20	E/2 NW/4 Sec. 4, T-41-S, R-24-E San Juan County, Utah	14-20-0603-7172 June 11, 1962	.0992482

100% Indian Lands

TOTAL 12,909.74

100.0000000

PHONE CONVERSATION DOCUMENTATION FORM

Route original/copy to:

☐ Well File _____☐ Suspense
(Return Date) _____
(To - Initials) _____☒ Other
OPERATOR CHANGE(Location) Sec___Twp___Rng___
(API No.) _____1. Date of Phone Call: 10-6-93 Time: 9:302. DOGM Employee (name) L. CORDOVA (Initiated Call ☒
Talked to:Name GLEN COX (Initiated Call ☐ - Phone No. (915) 688-2114
of (Company/Organization) MOBIL3. Topic of Conversation: OPERATOR CHANGE FROM PHILLIPS TO MOBIL "RATHERFORD UNIT".
(NEED TO CONFIRM HOW OPERATOR WANTS THE WELLS SET UP - MEPNA AS PER BIA APPROVAL
OR MOBIL OIL CORPORATION AS PER SUNDRY DATED 9-8-93?)4. Highlights of Conversation: _____
MR. COX CONFIRMED THAT THE WELLS SHOULD BE SET UNDER ACCOUNT N7370/MEPNA AS
PER BIA APPROVAL, ALSO CONFIRMED THAT PRODUCTION & DISPOSITION REPORTS WILL NOW
BE HANDLED OUT OF THEIR CORTEZ OFFICE RATHER THAN DALLAS.
MEPNA-
PO DRAWER G
CORTEZ, CO 81321
(303)565-2212
*ADDRESS CHANGE AFFECTS ALL WELLS CURRENTLY OPERATED BY MEPNA, CURRENTLY
REPORTED OUT OF DALLAS (MCELMO CREEK).

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET

Routing:

1-REC/47-93
2-DPS/58-93
3-VLC
4-RJF
5-INT
6-RL

Attach all documentation received by the division regarding this change.
 Initial each listed item when completed. Write N/A if item is not applicable.

- ☒ Change of Operator (well sold) ☐ Designation of Agent
☐ Designation of Operator ☐ Operator Name Change Only

The operator of the well(s) listed below has changed (EFFECTIVE DATE: 7-1-93)

TO (new operator) M E P N A
 (address) PO DRAWER G
CORTEZ, CO 81321
GLEN COX (915)688-2114
 phone (303) 565-2212
 account no. N7370

FROM (former operator) PHILLIPS PETROLEUM COMPANY
 (address) 5525 HWY 64 NBU 3004
FARMINGTON, NM 87401
PAT KONKEL
 phone (505) 599-3452
 account no. N0772(A)

Well(s) (attach additional page if needed):

***RATHERFORD UNIT (NAVAJO)**

Name: **SEE ATTACHED**	API: <u>43037-16405</u>	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____

OPERATOR CHANGE DOCUMENTATION

- Sec 1. (Rule R615-8-10) Sundry or other legal documentation has been received from former operator (Attach to this form). (Reg. 8-20-93) (6/93 Prod. Rpt. 8-16-93)
- Sec 2. (Rule R615-8-10) Sundry or other legal documentation has been received from new operator (Attach to this form). (Reg. 8-31-93) (Rec'd 9-14-93)
- N/A 3. The Department of Commerce has been contacted if the new operator above is not currently operating any wells in Utah. Is company registered with the state? (yes/no) ____ If yes, show company file number: _____.
- Sec 4. (For Indian and Federal Wells ONLY) The BLM has been contacted regarding this change (attach Telephone Documentation Form to this report). Make note of BLM status in comments section of this form. Management review of Federal and Indian well operator changes should take place prior to completion of steps 5 through 9 below.
- Sec 5. Changes have been entered in the Oil and Gas Information System (Wang/IBM) for each well listed above. (026 wells 10-6-93) (Wiw's 10-26-93)
- Sec 6. Cardex file has been updated for each well listed above. (026 wells 10-6-93) (Wiw's 10-26-93)
- Sec 7. Well file labels have been updated for each well listed above. (026 wells 10-6-93) (Wiw's 10-26-93)
- Sec 8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to State Lands and the Tax Commission. (10-6-93)
- Sec 9. A folder has been set up for the Operator Change file, and a copy of this page has been placed there for reference during routing and processing of the original documents.

ENTITY REVIEW

- Yes 1. (Rule R615-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) no (If entity assignments were changed, attach copies of Form 6, Entity Action Form).
- N/A 2. State Lands and the Tax Commission have been notified through normal procedures of entity changes.

BOND VERIFICATION (Fee wells only)

- Yes 1. (Rule R615-3-1) The new operator of any fee lease well listed above has furnished a proper bond.
- N/A 2. A copy of this form has been placed in the new and former operators' bond files.
3. The former operator has requested a release of liability from their bond (yes/no) . Today's date 19 . If yes, division response was made by letter dated 19 .

LEASE INTEREST OWNER NOTIFICATION RESPONSIBILITY

- N/A 1. (Rule R615-2-10) The former operator/lessee of any fee lease well listed above has been notified by letter dated 19 , of their responsibility to notify any person with an interest in such lease of the change of operator. Documentation of such notification has been requested.
- N/A 2. Copies of documents have been sent to State Lands for changes involving State leases.

FILMING

1. All attachments to this form have been microfilmed. Date: 11-17 1993.

FILING

- Yes 1. Copies of all attachments to this form have been filed in each well file.
- Yes 2. The original of this form and the original attachments have been filed in the Operator Change file.

COMMENTS

931006 BIA/Btm Approved 7-9-93.